

ANNUAL REPORT

ON THE

HEALTH AND SANITARY CONDITIONS

OF THE

BOROUGH OF WEYMOUTH & MELCOMBE REGIS,

FOR THE YEAR 1908.

BY

W. B. BARCLAY, L.R.C.P., D.P.H., Etc.,
Medical Officer of Health.

WEYMOUTH :
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**To His Worship the Mayor, and to the Aldermen and
Councillors of the Borough of Weymouth and Melcombe
Regis, and to the Education Committee of the same.**

WEYMOUTH,

January, 1908.

● **LADIES AND GENTLEMEN,**

In accordance with Section XIV. of Art. 18 of the Local Government Order as to the Duties of the Medical Officer of Health, I have the honour of submitting to you my Fourth Annual Report on the health of the District.

In a memorandum issued by the Medical Officer to the Local Government Board, of date Nov., 1908, the following paragraphs occur, which of themselves are explanatory of the course adopted in the Report, as I have followed strictly the order, in which the subjects upon which information is desired, are detailed :—

“The report should be chiefly concerned with the conditions affecting health in the district and with the means for improving those conditions. It should contain an account, brought up to the end of the year under review, of the sanitary circumstances of the district, and of any improvement or deterioration in these circumstances which may have occurred during the year. Care should be taken to report fully and explicitly on the influences affecting or threatening to affect injuriously the public health in the district, and on the action which has been taken, or which may still be needed, with a view to combat those influences. It is of especial importance that the medical officer of health should record what action has been taken to remedy unhealthy conditions which have been reported by him in previous annual reports, or in special reports presented during the year under review, and that attention should be called afresh, year by year, to such as remain unremedied.

“The following deserve to be especially borne in mind as subjects concerning which the Board desire to obtain, through annual reports of the medical officer of health, not only definite general information, but record also of particular changes of condition that may have occurred incidentally or by action of the local authority.”

I have endeavoured as far as possible to carry out the spirit as well as the letter of the above, and to be as candid as possible as to the state of your district. In being so, it is inevitable that I cannot meet with the approval of everyone concerned, as the lay and professional mind cannot always judge things alike.

In carrying out my duties I am continually indebted to the Medical profession for assistance and co-operation. My sincere thanks are due to the Members of the Council in general, and the Sanitary Committee in particular, for their kindness and support throughout the year.

I am, Gentlemen,

Your obedient Servant,

W. B. BARCLAY.



SUMMARY OF STATISTICS.

Area of the Borough in Statute Acres	...	...	...	1616 $\frac{5}{8}$
Population, Census 1901	...	...	...	19843
„ Estimated, middle of June	...	...	...	23600
Number of inhabited houses, Census 1901	...	...	...	3881
„ „ „ 1908	...	...	...	4638
Average number of persons per house, 1901	...	...	...	5.1
Density of Population, persons per acre	...	...	...	18
Uncorrected Death Rate	...	...	...	13

	Borough, 1908.	England and Wales. 1908.	76 Large Towns	142 Smaller Towns.	England and Wales less the 218 Towns.
Birth Rate	22 7				
Death Rate	12 8				
Zymotic Death Rate	76				
Infantile Mortality	93				

THE BOROUGH.

The Borough is formed from the union of the two ancient and separate boroughs of Weymouth and Melcombe Regis separated by the Harbour and its prolongation—West and North the Backwater.

Melcombe Regis lies to the East of the Backwater and North of the Harbour, it is more the level of the two, the maximum height above sea level being 108 feet. It is divided into two Wards, North and South. The Geological formation of the greater portion of Melcombe Regis is Oxford Clay, but that portion facing the Bay has an overlying strata of shingle and sand to a depth of 8 or 10 feet.

Weymouth lying to the West and South of the Harbour and Backwater, is the more hilly portion, the gradients being steeper, the maximum height being 175 feet. The Geological formation is Clay and Coral Rag.

The Area of the Borough was considerably enlarged in 1895 by including a portion of the Radipole Parish in Melcombe Regis and of Wyke Regis in Weymouth.

The Area as given me by the Borough Engineer is—

				ACRES.
Old Borough	{	Land ...	...	452 $\frac{1}{4}$
		Tidal Waters ...	...	311
				<hr/> 763 $\frac{1}{4}$
Extension ...	{	Radipole ...	...	437
		Wyke Regis ...	...	416 $\frac{3}{8}$
				<hr/> 853 $\frac{3}{8}$
Total ...				<hr/> 1616 $\frac{5}{8}$ <hr/>

POPULATION.

As in all years, except the Census year, this has to be estimated, and in consequence of the extension of the Borough in 1895, the usual method of estimation by calculating the rate of

increase as being the same in each decennial period, is not available.

It is somewhat difficult to arrive at a correct estimate, and I have taken all the various methods and struck an average, correcting this by means of the number of inhabited houses and the average number of persons to each house as at the Census in 1901.

The estimation has to be made for the *normal* population as at the end of June, and as there is a considerable increase in the number of inhabited houses, I have estimated the number at 23,600.

This does not take into consideration visitors or the men belonging to the Royal Navy. Were these estimated for—and the latter are with us during a large portion of the year—the numbers would be greatly increased.

The Melcombe Regis division of the Borough has increased somewhat more in proportion than Weymouth, and taking the basis of inhabited houses as a means of estimation, I estimate Melcombe Regis population as 11,805, Weymouth as 11,795.

METEOROLOGY.

Full details of the Meteorology of the Borough will be found in the appended Report of the Honorary Meteorologist, Mr. I. J. Brown, F.R.Met.Soc., but the following summary of his report may be of interest :—

Highest Maximum Temperature	...	80·8°	July 2 & Aug. 7
Lowest Minimum	„	19·3°	on Dec. 30
Mean Maximum	„	57·4°	
Mean Minimum	„	45·6°	
Mean of Maximum and Minimum	...	51·5°	
Difference from Average	...	+0·9	
Number of days on which rain fell	...	156	
Total fall in inches	... ..	24·57	
Mean Relative Humidity	...	79%	
Number of hours of bright sunshine	...	1857·9	
Days on which sun shone	...	313	

CLIMATE.

The Naples of England, as it aptly has been termed, possesses one of the most equable climates in the Country.

Its rare geographical position, situated at the extremity of a promontory, sheltered from the North by the Dorset Hills, with the Crescent Bay facing the East, and with the pure, fresh and invigorating breezes of the English Channel fanning it from the West, with its wealth of bright sunshine, its small rainfall, its soft yet mildly invigorating atmosphere free from any oppressive humidity; Weymouth equals, if it does not excel, any other health resort in the Country.

Although in easterly winds the Esplanade is somewhat exposed, yet one has only to travel to another portion of the Borough where the outlook is to the South and West and the English Channel, and this drawback vanishes.

Boating and Bathing are of the safest and best. Public Gardens are dotted here and there, whilst the many places of historical interest, and the diversified scenery of land and seascape—some of these unique—are easily accessible by numerous steamers and coaches.

The prevailing westerly winds and the sheltered position of the Town give to the Winter a mildness and salubrity which it is to be regretted are not more widely known.

OCCUPATION OF INHABITANTS.

To a considerable extent Weymouth may be considered, like other Health Resorts, a residential place.

Very few of the inhabitants are solely dependent upon the letting of houses in the summer, though a considerable number find this occupation very desirable, and frequently essential, for their income. The working or artizan class are chiefly engaged as skilled mechanics at Whitehead's Torpedo Works, or in the various building trades, with a small number in engineering and shipbuilding. The Harbour with its

shipping, boating and fishing also find employment for a small number. It cannot be said that any particular occupation has an influence on the Public Health.

HOUSING ACCOMMODATION.

During the past year there has been a considerable increase in the number of inhabited houses, an increase very much in excess of the number of new houses erected, consequently there are very few houses in the borough empty.

The majority of new houses erected are of a class and rental beyond the reach of the working class. The Borough being an ancient one the character of the houses vary greatly.

Rodwell district and Melcombe Regis North district may be considered to all intents, and with but few exceptions, residential, and the houses of modern type or recently modernized.

The centre of the town—Melcombe Regis South and that portion of Weymouth abutting on the harbour—are old. The streets are narrow, yard spaces diminutive, and the area generally congested. It is in these portions of the Borough that we have many of the older courts and alleys and some back-to-back houses, but as these portions have been receiving particular attention from the Sanitary Authority during the last six years, they now to a large extent compare favourably as regards cleanliness of surroundings, paved yards and streets, and sanitary conditions, with other more open and modern streets. Only a proper housing plan, with demolition and removal of many streets, and rebuilding, can ever bring many of these portions into an approach to the garden city of the future.

The Westham portion of the Borough is of much more modern construction and contains many rows of houses erected for and occupied by the working classes.

At the present time there is a serious lack of houses suitable for the working classes or labourer as apart from the skilled artizan. Houses below 5/6 per week are rare and eagerly sought after and are of the type of house previously mentioned as being

in the congested portion and not such as would now be allowed to be erected.

In consequence of this lack of cheaper residences, the people are compelled to sub-let, and many cases of overcrowding are brought to light, and are most difficult to deal with, as orders for abatement nearly invariably result only in a transference of the overcrowding.

Added to this lack of house accommodation, we have periodically large influxes of people who have to find sleeping accommodation. I do not refer to the summer visitors, but to the men of the Royal Navy. As mentioned in my last year's report, large numbers of these sleep on shore when on leave, and find accommodation in the houses of the working classes. There is no objection to this—though I am advised that such houses should be considered common lodging houses—if sufficient care were exercised to limit the number of lodgers to the accommodation available. But very many cases are reported to me—though I have never been able to have such verification as would enable legal action to be taken—of the permanent residents being herded together in one room or occupying the kitchen, whilst all available bedrooms were let for the night. Other cases also have been reported to me and enquired into as overcrowding cases that turned out to be only cases of gross immorality.

It is evident that both from a moral and a health point of view action must be taken to remedy this state of affairs, and the whole root of the evil lies in the lack of cheap housing accommodation. It is a matter of serious consideration whether the Municipality, being themselves holders of land and buildings, should move in this direction or continue as in the past to leave it to private enterprise.

Under the Housing of the Working Classes Act considerable action has been taken throughout the year. After three years' delay, the worst portions of Horsford Street—upon which a representation was made in 1905, under Part II. of the Act, as being an insanitary area—has been permanently closed, and I

have now asked for a demolition order, the matter being under consideration at date. Action has been taken as regards Wellington Place, which has been nearly completed, Franchise Court, some portions of St. Leonard's Road, Chapelhay Street, High Street, Beale's Court, Love Lane, Newberry Terrace, Cove Street, East Street, etc., with a few exceptions, and in these the orders are recent, action has or is being taken. Penny Street, Walpole Street, and the Park district have once again been reported as requiring drastic action, but has been postponed. As these were first reported in 1904 by my predecessor, and have since been yearly brought up, further delay is to be much deprecated.

The matter of West Plain and surrounding district was this year, for the second time, a subject of enquiry by the Local Government Board. The "status quo ante" has been retroverted to, and legal reasons prevent my entering further into the subject.

Bye-Laws dealing with the erection of New Houses were adopted in October, 1897, superceding those of 1871. Excellent as these Bye-Laws are in intention I have been forced to call frequent attention to their evasion.

The only inspection of new buildings, there being no building inspector, is that of the drains, which, as far as the disconnecting chamber, is done by the Health Department. From the disconnector to the sewer, however distant the former may be, it is under the Surveyor's Department.

This subject of Inspection of New Buildings and Drainage has been a matter of discussion and report each year since 1902 (it may also have been previously to that date) and the only step gained has been the transference in 1906 of the *testing of new drains* to the Health Department. This was a real gain and has resulted in great improvement in drainage matters, but unfortunately during the last year a considerable number of houses erected in the Radipole and Rodwell districts have been reported as being constructed—as regards drains and sanitary arrange-

ments generally—in a very jerry manner, and not in accordance with the Bye-Laws.

These houses have been completed and occupied, and I believe some purchased by their occupiers, in spite of protests. What is the use of Bye-Laws if they are not enforced ?

It has been urged that new buildings are entirely under the Surveyor's Department, and that the Health Department has nothing to do with them, apart from inspecting the drains. I must strongly and publicly protest against this. The duties of the M.O.H. are defined by statute, and are to the effect that he shall inform himself and advise his Authority upon all matters or "Influences affecting or threatening to affect injuriously the public health," and shall advise them also "On any question relating to health involved in the framing and subsequent working of such bye-laws and regulations as they may have power to make."

If jerry building or jerry construction of all sanitary arrangements and drains do not affect or threaten to affect injuriously the public health, then all sanitary legislation has been useless.

I have in previous years, and again in this, simply asked that the Health Department should be allowed to inspect plans of drainage, etc., *previously* to their being passed by the Council and that Bye-law 110 should be amended to the effect that no new building shall be allowed to be occupied until a certificate has been received that it is fit for occupation, and that where the word Surveyor occurs the words *and* Medical Officer of Health should be added.

As at present there is nothing to prevent a new building being occupied before it is plastered, and the usual rule here is that they are occupied before the plaster is dry. A Building Inspector has long been a necessity for the town as, though plans are deposited, there has never been anyone to see that they were adhered to, and the consequences have been dire, and it has been my painful duty to again and again call the attention of the Sanitary Authority to the continued erection and passive

sanction of dwellings that are not in such a state as to receive a sanitary certificate.

I have strongly protested against the Corporation themselves in the erection of their Pier Pavilion, taking a most retrograde step, by allowing the drainage—including sewage—from one portion to be discharged direct into the harbour near the landing steps and passenger landing stage, as active steps have been taken to compel, during past years, the severance of all drainage connections with the harbour, and their junction with the main sewers. This action of the Corporation in making the river and harbour again into a sewer cannot but have a most prejudicial effect. Had the plans been open to the inspection of the Health Department, it is certain that a protest would have been lodged prior to their adoption, instead of allowing that department to find it out for themselves *after the drains were laid and covered in*. No test of these drains was made by the Health Department, notice not being sent.

WATER SUPPLY.

The Borough is supplied throughout by a private Company, which also supplies various villages in the adjacent Rural District. The water springs from the upper green sand, below the chalk at the foot of a hill beyond the village of Sutton Poyntz, $3\frac{1}{2}$ miles from the town.

A large number of springs issue from the side of the hill and run directly into a small reservoir or collecting pond, partly concrete and partly soil. It is not stored here but flows at once through a strainer to the pumping station.

The whole source is surrounded for about four acres by an unclimbable iron fence, and is uninhabited for a considerable distance round. The height of the reservoirs and springs is about 80 feet above sea level. The water flows by gravitation to the pumping station 40 feet below, where partly by turbine engines and partly by steam it is pumped to the covered reser-

voirs at Preston 160 feet higher, and at Wyke 185 feet higher. From the Preston reservoir it flows by gravitation to a covered reservoir at Rodwell at 142 feet, and these—Rodwell and Wyke—supply the town of Weymouth, the latter serving the higher parts of the town. The supply is on the constant system, and the quantity is sufficient, averaging $25\frac{1}{2}$ gallons per head per day. It is of excellent quality, though rather hard. The accompanying analysis has been given me by the Company as having been made by their Analyst :—

(COPY).

Western Counties Laboratory,
 Southey House, College Green,
 Bristol,
February 19th, 1908.

To the

Board of Directors of the Weymouth Waterworks Company.

Gentlemen,

I beg to hand you the results of analysis of a sample of the Weymouth Water received on the 14th inst. as follows :

				<i>Grains per gallon.</i>
Saline Ammonia ...	...	...	...	·0008
Albuminoid Ammonia ...	...	...	...	·0015
Nitrogen as Nitrate ...	...	...	...	·253
„ as Nitrite ...	...	...	...	none
Oxygen absorbed in 4 hours at 80° F.			...	·003
Chlorine as Chloride ...	...	...	...	1·80
Total dissolved solids ...	...	...	...	22·0
Alkalinity ...	...	...	...	12·5
Earthy salts other than Carbonates ...			...	2·0
Hardness (by soap test) ..	...	...	...	13·0
Poisonous metals ...	...	...	...	absent

Colonies of Bacteria cultivable on Gelatine plate 54 per C.C.

B.Coli.B. Sporogenes Enteritidis as Streptococci, absent.

These results are in every way completely satisfactory.

I am, Gentlemen,

Your obedient Servant,

(Signed) F. WALLIS STODDART.

COWSHEDS AND MILKSHOPS.

There are nine Cowkeepers within the Borough, an increase of two since last year.

The condition of the Cowsheds is one of slow and gradual improvement. The floors of all, with one exception, are good. The drainage of all is good, and has been renovated or an entirely new system laid in every case. The yards in most have been cleansed and paved and are now being kept free from all accumulations of rubbish or manure. Milking is now performed in a somewhat cleaner manner than previously, though far from perfect, and the continued supervision added to the persistency and firmness of the Sanitary Committee are now shewing good results.

One thing—and an essential in the estimation of all authorities—is yet absent, and that is the rapid cooling of the milk immediately after milking. I cannot persuade any of the cowkeepers to carry this out, but have been hoping that the new Dairies Act long waited for will contain some proviso to allow us to enforce this.

Another essential, absent to a great extent, is efficient provision for *scalding* utensils. In only one case is this now capable of being effectively done, a boiler with a steam jet being now provided. In all other cases hot water—not boiling—is supposed to be used, but I have frequently found it only luke warm, the same water having been used for cleansing several cans in succession. This matter is being dealt with during the coming year.

Milk Purveyors are 49 in number, 34 being shops within the district, and 15 being purveyors from without the district. These shops on the whole are now fairly well kept, though difficulty is still found, in some few cases, in enforcing the covering of the milk utensils.

The places doing a fairly large business are no difficulty; it is the small dealer, with whom milk is only one of a hundred other articles, that is the general defaulter. A very large portion

of our milk supply is brought in from the rural district around us, and though many of the Dairy Farmers are registered within the Borough as purveyors of milk, we have no authority over them excepting so far as their utensils, etc., are whilst within the Borough engaged in their trade, and in nearly all the cases the bright tins and gaily painted milk carts show an outer veneer of cleanliness. In two cases steps are being taken to prevent the use of an ordinary cart, not over cleanly, from being used for the delivery of milk from house to house.

ICE CREAM PURVEYORS.

A register of these is kept and they are treated in every way as Dairies. Close inspection is made during the summer season of their premises and their manner of manufacture. One or two of the foreign element still leave much to be desired in the matter of cleanliness. Their education in this line is being proceeded with.

OTHER FOODS.

One of the many anomalies in administration of this Borough is exemplified under Food Inspection.

The Health Department, acting under the Sanitary Committee, take cognisance only of the inspection of meat, fish, and perishable articles within the Borough, excluding the harbour and its piers and wharves. The Chief Constable, acting under the Watch Committee, takes samples and submits these for analysis, under the Food and Drugs Act, whilst the Medical Officer to the Port Sanitary Authority takes charge—under a separate and partly alien Authority—of the Harbour, and under the Public Health (Regulations as to Food) Act, 1907, will inspect all perishable goods landing at the harbour. To render confusion worse confounded, the permanent Deputy to the Port

Sanitary Authority, and who would act within your harbour and landing stage, is an M.O.H. of an outside district.

Where the jurisdiction of one Medical Officer begins and the other ends is a problem I have been unable to personally solve, or gain an authoritative solution.

A large trade in perishable food is carried on in the harbour and after a careful perusal of the Act of 1907, I infer that this is all imported from a place or places—so far as that Act is concerned—outside the United Kingdom.

UN SOUND FOOD.

Four seizures of unsound food were made : (1) On information received from the police. I visited the yard of a public house on a Sunday morning and found the greater portion of a carcase of a cow being cut up and put into pickle. The condition of the meat pointed to the animal having died, probably from some inflammatory affection, and utterly unfit for human food.

The place was not registered as a slaughter house but evidently had been used for either slaughtering animals or for their preparation for sale for some considerable time. The carcase was seized and, by consent of the owner, destroyed. No action was taken against the owner, but the place has been closed for this purpose.

(2) Four cases of eggs refused by the canteen manager of H.M.S. Irresistible were seized, when landed on Weymouth pier, by the deputy M.O.H., and by Magistrates' order destroyed. The question of the jurisdiction of the Borough Medical Officer arises in this transaction.

(3) Nine sacks of potatoes in a putrid state were found concealed in an outhouse (on an inspection for other purposes), were seized, and by Magistrates' order destroyed.

(4) 22 lbs. Bacon were seized and, by consent of the owner, destroyed.

No further action was taken in any of the cases.

Meat and Food Inspection has to be carried out by the M.O.H. personally, there being no qualified Inspector for such.

In connection with seizure No. 1 and unregistered slaughter houses, I have reason to believe that this is not a solitary example, and that a considerable trade is done in this manner. In a previous year a similar case was found. Instructions have been issued to make a searching enquiry into such, but no information has been forthcoming.

Eight places are on the Register of Factories and Workshops as being engaged in the preparation of sausages, etc. Four of these are Factories—using motive power. All are kept in a cleanly state, and the work so far as can be judged at the times of inspection, carried out in a proper manner.

There are six slaughter houses on the Register—a decrease of four. As stated in last year's Report, two licenses were renewed until March 31st, 1908, with a notification that after that date no further renewal would be made. Both of the licencees accepted the inevitable and found more suitable and sanitary premises.

A third licence had been refused in April, 1906, unless the premises were brought into a sanitary state. Nevertheless the place has been continually occupied, even after further notice, until late in 1908. The continued defiance has been reported upon month after month, but the reluctance of the Authorities to proceed to prosecution, rendered all action of the Staff abortive. As far as we are now aware, occupation as a slaughter house has now ceased.

The good report as to cleanliness mentioned last year has been maintained.

Inspection of all animals slaughtered is manifestly impossible under present conditions, and is practically non-existent. The M.O.H. times his visits as much as possible to the period of slaughtering, but these visits are few.

There is no reason, however, to believe that tuberculosis meat is to any extent sold by any of the butchers slaughtering in the district.

There is now more than ever an urgent necessity arising for a Public Municipal Abattoir. This subject has been reported upon year after year and urged *ad nauseam*, but as it only deals with the health of the people, and not their amusement, is shelved *sine die*.

RETURN UNDER THE FOOD AND DRUGS ACT.

<i>Name.</i>	<i>No.</i>	<i>Genuine.</i>	<i>Prosecutions.</i>
Demerara Sugar	3	3	Nil
Lard	7	7	„
Butter	7	7	„
Milk	16	16	„
Malt Vinegar ...	4	4	„
Cheese	1	1	„
Tea	3	3	„
	<hr/> 41 <hr/>	<hr/> 41 <hr/>	

FRANK EACOCK,
Chief Constable.

SEWERAGE AND DRAINAGE.

The sewage of the Town is discharged into the sea, at a point 1,150 feet beyond the Nothe Point, the extreme point of land of the Borough, and 25 feet below the low water level of ordinary Spring tides. It is pumped thither, as much as possible during ebb tide, through an outfall sewer of about $1\frac{1}{2}$ miles length, from the large collecting tank at Westham. This tank is of the capacity of about 300,000 gallons, and is supplied by two intercepting sewers, one from Weymouth, one from Melcombe Regis, into which all the street sewers converge. During recent years, several relief surface water drains have been constructed, which convey storm water direct into the harbour, etc. These have considerably relieved the pumping station. In times of storm, however, in spite of these relief drains, the pumping station is unable to compete with the large volume of diluted sewage entering the tank, and it is necessary to divert that portion coming down the Eastern bank of the Backwater, into the Backwater, below the dam, by means of an old sewer, and to pump from the tank direct into the Backwater, below the dam, at all states of the tide. This volume of sewage is so diluted by storm water, as to be practically innocuous, during the short period in which it is discharged into the Backwater, or Harbour. Samples have been taken just outside the outlet, and analyses made, and the samples kept for six months, for the development of putrefactive or other processes, and have given the most satisfactory results. It is otherwise, however, where the sewage is discharged above the dam, with its lack of free tidal discharge.

Apart from the general system there are two local sewers receiving the drainage of about 100 houses in the Belfield, Buxton, and Old Castle districts, which discharge their contents untreated into Portland Roads.

A scheme is in existence for dealing with these, and conveying their contents to the general system, but as it is dependent upon the construction of Docks and Railway by the Great Western Railway Company, which have received Parliamentary

sanction, the Corporation have to await their pleasure for the completion of the scheme.

The sewers and house drains of the Park district which are at a low level, have been a perennial source of trouble.

There is no doubt, however, that if these were reconstructed, with proper junctions in the direction of the flow, and with proper flushes, and the storm water to a great extent excluded from the sewers, that the flooding of this district would be practically absent. As a sample of what is found in this district, one case recently investigated will suffice. As this case is in houses rented at £35 and £40, it is evident that houses rated at £10 to £12 in the same district are not in any better condition, and in fact those opened have been found to be worse. Seven houses have one joint drain running from East to West, this meets in direct opposition (from the West to East) in a small cesspit in the yard of one of the houses—an equal joint drain of other seven houses. Result, the stronger flow dams up the weaker. To add to the inefficiency the outlet again ran—going off at an acute angle—in a South Easterly direction. All these drains had the slightest possible fall. In consequence of the blocking up occurring some four times within six months, attention was drawn to it. It has been partially remedied.

Blockages of drains in this district are of frequent occurrence, and the subject requires the most serious consideration of the authorities.

Regular flushing of sewers is carried out during the summer months by means of a specially fitted cart, but this is only a very inefficient method. The provision of large automatic flushing tanks at the head of each sewer would be of the utmost benefit to the public health generally. The sewers are ventilated by 66 upcast Ventilating Shafts and 13 Webb's Lights.

Attention has been called to the lack of drain and sewer ventilation in the Chapelhay district, one of the high points in the district. Very few of the house drains are ventilated and few are even disconnected. This, with the lack of flushing

apparatus, has rendered this district during my period of office, a perfect forcing bed for infectious diseases. During this year a strenuous attempt has been made to improve this condition of affairs, but the progress has been slight.

In one portion of this district, again in houses of the better class, it was found that the soil pipes and W.C.'s discharged in the open into the gully traps under the kitchen window. Legal proceedings had to be taken to compel an abatement, but at the last moment the owner of the property accepted the conditions and the work is now in progress.

The drains of the new houses to the number of thirty-three have been tested during the year.

Five cases have come to my notice during the year—principally through one builder—who has erected new buildings and in other cases laid down a new system of drainage, without notice of intention to cover in such, reaching this Department.

Such action tends to lend strength to my appeal, in another section of this Report, for an addition to the Bye-laws requiring a certificate to be given before a house can be occupied.

In one of the houses a tenant required a Sanitary Certificate before entering, and on testing, the drains were found defective, and on being laid open, were found to be laid in a most unsatisfactory manner and not in accordance with the Bye-laws.

POLLUTION OF RIVERS AND STREAMS.

THE BACKWATER.

During the year alterations have taken place in the sheet of tidal water which have materially altered the configuration of the lake, and consequently its general characteristics.

Where formerly a Trestle Bridge extended from bank to bank, carrying the Weymouth and Portland Railway, there now exists, extending for 735 feet from the East bank, a solid embankment, slightly concave to the North, and faced roughly with irregular blocks of stone.

Extending from the West bank is a similar embankment of 285 feet, but containing one Arch of 25 feet clear waterway towards the land end, and in the centre supporting an Iron Bridge consisting of five steel spans of 108 feet each, joining the two embankments are four double sets of Iron piers.

That portion of the old lake extending from the Dam to Radipole, is now in a sense divided into two irregular lakes with a connecting link of about 520 feet width.

In the larger or Northern portion, there is now to the immediate North of the embankment on the Eastern side, a bay, into which the prevailing winds drive all flotsam. From careful observation during the whole of the period that the embankment has been completed, one may with certainty state, that the water in this bay is comparatively still. Any current formerly existing has now been deflected, to the middle of the lake, and the scour there has been much increased, considerably deepening the bed of the lake at the edge of the embankment. When the Dam Gates are closed, practically the only movement is from the rise and fall of the tide. Into this bay of comparatively quiescent water, the outlet for the storm water pumped from the Park district is conveyed, an accomplished fact which I cannot but seriously deprecate.

From the evidences shown, even in this short period, I am very pessimistic as to the future condition of this portion of the lake during the later summer months of each succeeding year.

As the Southern and Eastern side of the embankment is not completed, any remarks as to the bay now formed there may be withheld.

Only once during the year did any emanation from the weed in the backwater trouble the town, and this was entirely due to

a combination of adverse circumstances not likely to again occur, and which can be guarded against.

From the dam of the Backwater to the sea is the harbour, and this portion of the district is under a separate sanitary administration, a circumstance which does not tend to uniformity of action, or lessen delay, in dealing with complaints or nuisances arising. It is an anomaly that what might be termed a thoroughfare of the town and extending right into its heart, should, for all sanitary or health purposes, be without the jurisdiction of the borough officers.

The difficulties arising from this dual administration are not few : some of them were commented upon in last year's Report.

The river Wey enters the backwater at its northern end. This stream receives the sewage of the villages of Upwey, Broadwey, Nottingham, and Radipole.

The western boundary is to a great extent in the Rural District, and is agricultural land.

EXCREMENT DISPOSAL.

This may be stated to be entirely the water carriage system. One Laundry Factory has earth closets, the residue being buried in adjacent land. With this exception and one or two houses on the extreme borders of the borough, where sewers or levels are not available, and one house on the Nothe Quay, with the Corporation Pavilion, all the houses in the district are connected with the main sewers and have water closets.

The greatest defect with regard to this system is that so many of the water closets have not a flushing cistern and water supply. It is principally in those districts, the Park district and Chapelhay, where a proper flushing of closets is an extra necessity that they are absent, and though year by year the Health Department urge the need for using the powers we possess under the various Public Health Acts and the Bye-laws to compel the adoption of a proper flush, nothing is done. The Park

district suffers severely, rarely a week passes that solid masses of excreta have not to be removed from the drains and sewers and these flushed.

NUISANCES.

During the year 149 applications and complaints as to nuisances, etc., were received and all were investigated. In ten of this number no action was taken by this Department, the complaint either being not justified or having been remedied before inspection was made. In ten others the matters were referred to other Departments and have been attended to.

105 written notices have been sent and 14 statutory notices, all of which latter have been complied with or are in course of being carried out, and 91 of the former.

The principal causes of complaint have been manure heaps, not regularly emptied, offensive smells from street grids, blocked drains, and overcrowding. The major portion of the work done throughout the year has, however, been the result of systematic inspection of districts and detection of nuisances in houses where infectious disease has been.

COLLECTION AND DISPOSAL OF HOUSE REFUSE.

The collection of house refuse is done by the Corporation direct, and is under the Borough Surveyor's Department.

The scavenging is so arranged that every house shall be visited three times a week, and the two main business streets daily. The refuse so collected is conveyed in covered carts to Westham, where it is destroyed in one of Meldrum's Destructors. The steam generated by the destructor is used for working the engines which pump the sewage of the Borough to the outfall in the bay.

In accordance with the bye-laws every house is to be provided with a "suitable covered receptacle" for house refuse. In the past this bye-law has been more honoured in the breach than in the observance, few of the heterogeneous articles used as a receptacle being either suitable or covered, with a consequent unsightly and unsavoury display, and a littered street or path daily in evidence. "Notices calling attention to the bye-laws have during this summer being delivered to every householder, and steps are now being taken to take the names of all offenders, for report to the Sanitary Committee, with a view to further action."

The last paragraph is a quotation from 1906 report, and certain offenders were reported. No further action was sanctioned. The householder who wishes to conform with the law, complied with the notice sent, the householder who defies the law does so with impunity; the law keeper is penalized, the law breaker escapes.



GENERAL SANITARY WORK.

The Inspector of Nuisances presents the following summary of General Sanitary Work not elsewhere commented upon.

Houses, premises, etc., cleaned, repaired, white-washed, etc.	...	...	...	16
House Drains—				
New provided	...	...	...	40
Repaired, cleaned, trapped, etc.	...	...	...	160
Privies and W.C's.—				
New provided	....	...	...	28
Repaired, etc.	...	...	...	14
Supplied with water	...	...	...	37
Miscellaneous—				
Removal of accumulation of manure, animal and other refuse	...	...	...	19
Animals, fowls, etc., removed, being improperly kept	...	...	...	9
Lodging houses registered	...	...	...	3
Legal proceedings, summonses	...	...	...	1
General remarks—				
Manure pits built	...	...	...	13
Old drains tested	...	...	...	40
New house drains tested	...	...	...	33
Overcrowding	...	...	...	4
Inspections of houses...	...	...	...	1632

J. H. KEELEY, I.O.N.

BYE-LAWS.

Bye-laws as to Houses Let in Lodgings have been urged during the last three years, to deal especially with that class of house which, during the presence of the Channel Fleet at their base, habitually let rooms for one night to the men on shore leave, and in a great many cases leading to overcrowding. Such bye-laws are again under discussion, but the subject is a most difficult one to deal with in a satisfactory manner.

Bye-laws dealing with offensive trades under the Public Health Act Amendments Acts 1890 and 1907, are at present in course of preparation.

Bye-laws dealing with Van-dwellers, who of recent years have made this district their winter quarters, and have been found difficult to satisfactorily deal with under the Public Health Act 1875, are now in course of preparation.

As mentioned elsewhere, the Bye-laws dealing with the erection of new buildings require amendment. These have twice been recommended by the Sanitary Committee but have failed to meet the view of another Committee.

The Regulations under the Dairies, Cowsheds, and Milkshops Order are obsolete, and require bringing up to modern requirements. No action has been taken to bring these forward as it has been hoped that a new Bill dealing with the whole matter of Milk and Dairies, etc., would pass through parliament.



SCHOOLS.

These are dealt with fully under the Education Report.



INFECTIOUS DISEASE (Notifiable).

The Returns reaching me under this Act shew the number of cases notified during 1908 as 171—a great increase over 1907, and the worst since 1901-2.

Of the total cases notified, ten were withdrawn upon further observation as not being the disease originally diagnosed, whilst some four more, proved also, after continued observation to be fallacious, though the notifications were not officially withdrawn. This gives us an actual number of 157, of which Weymouth was responsible for 113 and Melcombe Regis 44. This is equal to a rate of 6·6 per 1,000 of the estimated population.

The following Tables give the notifications for each month and the rates for the past ten years. It will be seen that the year is the third highest.

		Diphtheria	Erysipelas	Scarlet Fever	Enteric Fever	Phthisis	Totals
January	...	2	—	4	—	—	6
February	...	2	—	1	—	—	3
March...	...	—	—	3	—	—	3
April	...	—	—	2	—	—	2
May	...	—	—	9	—	—	9
June	...	3	—	3	—	—	6
July	...	1	—	18	—	—	19
August	...	—	—	13	—	—	13
September	...	2	1	9	—	—	12
October	...	—	—	26	—	—	26
November	...	—	—	23	—	—	23
December	...	—	1	32	2	—	35
Totals	...	10	2	143	2	—	157

Four Diphtheria and ten Scarlet Fever notifications are not included, having proved not to be these diseases.

1898	...	0·8 per 1000	1903	...	1·3 per 1000
1899	...	1·1 „	1904	...	0·3 „
1900	...	5·9 „	1905	...	1·4 „
1901	...	14·0 „	1906	...	3·7 „
1902	...	8·8 „	1907	...	2·7 „

SCARLET FEVER.

The year has been a bad one, closely approaching the scare years of 1901 and 1902 in numbers.

There were 153 cases notified during the year, the monthly distribution being shewn in the table of notifications.

The Disease was first shewn—apart from sporadic causes—in the Park district shortly after the Easter holidays. After the first few notifications the focus of infection was narrowed down to St. John's Girls' School, and a careful outlook was kept for some ambulant case. Every case of absenteeism from school was first investigated, but proved fruitless, and a week or two elapsed before a desquamating case was detected in the class. This girl had first felt ill during the early days of the Easter holidays, and had returned to school at the end of the vacation. The parents not recognizing the disease, which was of a mild type, though albumen was present in the urine for many weeks. On the removal of this case the slight outbreak terminated.

Sporadic cases occurred at intervals, easily traced to outside sources, but in July, following close upon certain Sunday School trips to an outside district, a fresh outbreak started and was confined nearly entirely to the Weymouth Ward. The focus of infection—after the introduction—soon proved to be centred, curiously enough, in one Sunday School. Each week cases were notified on the Thursday and Friday only, proving the infection to be contracted about the Sunday. Inspection of children was made but proved fruitless, and the Managers at once acceded to my request to close the Sunday School for a time. This proved successful, but on the re-opening of the day schools in September the disease reappeared shortly afterwards, being confined entirely to Holy Trinity Girls' School. This was of a peculiarly virulent type and several deaths occurred. Daily examination of the scholars and house visitation failed to find any suspicious case, and only towards the beginning of November did the measures adopted meet with any success, to be followed within a fortnight by a fresh outbreak in the Infant School. During October and November some fifteen cases were detected

by the Medical Officer amongst children attending school. Of these five were actually at school with the rash upon them, the remainder were desquamating. In December, the outbreak continuing, it became evident that the school premises and books were infected, and on December 10th the girls' and infants' schools were closed and a thorough disinfection and cleansing was ordered and carried out. This modified the outbreak considerably, but cases continued to occur, traceable to attendance at public parties, etc., but the carrier cases were not always found. A case in one of the hospitals occurring, the child having been in the ward three weeks, led to an investigation and an outpatient was found in a desquamating state. Whether this was cause and effect we were unable to determine.

The difficulties in the way of dealing with such an epidemic have been the carelessness—sometimes approaching wilful neglect,—the lack of moral rectitude, and the ignorance of the public ; of these three the least cause is the latter.

I have been more than shocked at the wilful prevarications—to use the mild word—that have been so prevalent, and at the absence of regret or shame when these have been exposed.

No difficulty has been found in persuading patients to be removed to the Isolation Hospital. With few exceptions the cases were treated at the Borough Isolation Hospital. Some few occurring in the private practice of the Medical Officer to the Port Sanitary Authority were removed under his instructions to the Port Sanitary Hospital.

I mention this as it was reported that this had become necessary owing to the Borough Hospital being overcrowded. As mentioned elsewhere, at no time did this occur. At the period of highest pressure we had accommodation, without crowding, for seven more scarlet fever patients.

DIPHTHERIA.

Fourteen cases were notified. Of these four proved negative after repeated bacteriological examination and can be excluded.

Twelve of the cases were removed and treated at the Isolation Hospital.

Two cases died within a short period of admission. One of these—only admitted because of the death of a brother from “croup,” he shewing similar symptoms—was only proved after post mortem examination.

The attack rate is equal to .42 per 1000 estimated population.

The death ,, ,, .08 ,, ,, ,, ,,

ERYSIPELAS.

Two cases were notified, both in aged people. The usual inspection for sanitary defects followed the notification and in one case serious sanitary defects were found. As this case was only notified at the end of the year, these have not yet been remedied.

SMALL POX.

No cases or suspicious cases were brought to notice during the year.

CHOLERA.

No cases were reported.

ENTERIC FEVER.

Two cases were notified, both in the month of December, and both in Service men. The first, a gunner in the Army, was notified in the second week in December. No local cause could be found as a means for infection, and as the man had been absent on leave at about the probable period of infection, it has been assumed that he contracted the disease away from home.

Enquiries have been made, but the information gained has been so scant as to lead to nothing definite.

The second case, a Naval Officer, whose ship is at present in Portland Harbour, was notified on December 28th. As I understand several cases of enteric are known amongst the Officers of the Fleet, and no other cases are known amongst the Civilian population, it is a proper assumption that the cause lies within the Fleet itself. Enquiries, however, are being prosecuted. Since the close of the year this case has proved fatal.

NON-NOTIFIABLE DISEASES.

MEASLES.

This disease has been absent during the year. A few cases were reported as occurring in a private school, but the complaint did not spread. A few isolated cases brought to my notice through the elementary schools, proved in each case to be scarlet fever.

No deaths have been registered as due to measles.

WHOOPIING COUGH (PERTUSSIS).

Some few isolated cases were brought to my knowledge, principally among school children, but nothing like an outbreak. A private school has been affected to a considerable extent.

Four deaths are registered as being primarily due to whooping cough, three being in infants under one year of age. This is equal to a death rate of .17 per 1000 population. This seems a very high death rate considering the few cases of the disease known to have occurred.

CHICKEN POX (VARICELLA).

A few isolated cases have come to my knowledge. A case of Scarlet Fever in the Isolation Hospital developed a very

severe attack during the second week of internment. Two other cases followed it, also exceptionally severe.

MUMPS.

This disease has also practically been absent throughout the year.

EPIDEMIC DIARRHŒA (GASTRO ENTERITIS).

There is a slight diminution in the number of cases of death from this disease. No outbreak of Diarrhœa was known, and with one exception the deaths were infantile, and due in nearly every case to defective feeding. All were bottle fed. The death rate is .25 per 1000 of the population as compared with .3 last year. In 1906 the rate was .6 and in 1905 .8, shewing a continued decrease.

CANCER.

22 deaths were registered as due to cancer ; 13 in Weymouth, 9 in Melcombe Regis. This is equal to a rate of .93 per 1000 inhabitants. The corresponding rates for former years are as under, which shows that there is no diminution in this awful scourge.

1900	...	0.50	1904	...	0.97
1901	...	1.05	1905	...	0.71
1902	...	0.59	1906	...	0.9
1903	...	0.63	1907	...	0.64

The average for the eight years (the only years figures are available for) is .74 per 1000.

ISOLATION HOSPITAL.

The Borough Isolation Hospital is outside the Borough boundary, near Chickerell, in the Weymouth Rural District.

It is situated in an enclosed piece of ground $5\frac{1}{2}$ acres in extent. It is built of galvanised iron, wood lined, and heated by slow combustion stoves.

It consists of a central administration block and two detached ward blocks, connected by a covered passage-way with the central block, a laundry block and other outbuildings. Accommodation is provided for twenty patients in each block, and two rooms have been converted in the administration block into a ward for two beds, which may be used either for enteric cases or for observation purposes in doubtful cases.

During 1908 160 cases have been admitted into the hospital, and these may be classified as under :—

Diphtheria	...	...	...	10
Scarlet Fever	...	...	...	136
Enteric Fever	...	...	...	0
Suspected Diphtheria	...	...	...	2
„ Scarlet Fever	...	...	...	12

Seven deaths occurred in the Hospital, two from diphtheria and five from scarlet fever.

The permanent staff consists of Matron, Nurse, Porter and Wife who acts as Cook. A Laundress is temporarily provided. Assistance in nursing is provided from the Trained Nurses' Institute, when required. Such has been necessary during the last five months of the year, when the staff of nurses had to be increased gradually to four.

Maintenance alone of patients and staff is at the rate of a fraction under 8d. per day per head, a sum much under that usually allowed.

A sum of £7 8s. 6d. has been received towards maintenance of patients in hospital.

The former Small Pox Hospital which adjoins this and has a separate administration department has now, under agreement with the Local Government Board, become available for general isolation purposes (excepting Small Pox) and this now gives 50 beds, and allows if necessary of four distinct Infectious Diseases being treated concurrently.

The wisdom of those responsible for the erection of the Isolation Hospital has been amply proven during the year. Had a small place available only for what might be termed fair weather times, been erected, the prompt removal and isolation of the large number of scarlet fever cases occurring during the latter months of the year, could not have been carried out, and the results would in all probability have been disastrous. At no time has there been any overcrowding, the maximum number of patients on any one day being 44, but the average during the month of December, the period of highest pressure, being 38. It was fortunate that during this period of pressure the only infectious disease in the town was scarlet fever. No provision is now available for Small Pox cases, but the matter has been under the consideration of the Sanitary Authority.

Disinfection of clothing and bedding is carried out by means of superheated steam, in a Washington Lyons (modified) Steam Disinfector. A special building was erected two years ago for the purpose of a disinfecting station, and for housing of the ambulances.

During the year 275 lots, comprising 8713 articles, have passed through the disinfector. In addition, school books to the value of £250 and which had been exposed to contamination with scarlet fever, were disinfected, and with success so far as material damage is concerned. No complaint of damage to any article has been received.

Disinfection of houses is carried out by means of a Mackenzie Pneumatic Sprayer and a solution of Formaldehyde. This means has been found both efficacious and speedy.

The disinfectant is varied according to the circumstances and the disease. All the schools of the Borough are systematically disinfected during the periods of vacation, and where infectious cases have been present are disinfected each week end, and in one school certain rooms were sprayed every alternate evening.

175 houses and 34 schools were disinfected during the year.

TUBERCULOSIS.

Voluntary notification of Pulmonary Tuberculosis was instituted in 1905, but cannot be considered to have had any success. Excluding 1905, as the notification was only instituted in August, the numbers notified in each of the three years 1906, 1907, 1908, were respectively 3, 3, and 0. As the deaths alone from these diseases were for the respective years 21, 33, and 22, it is evident that the notification was more honoured in the breach than in the observance.

Deaths from Phthisis are immediately notified the M.O.H. by the Registrar, and the relatives are encouraged to have the rooms and bedding disinfected by the sanitary officers. In nearly every case this is done.

Where cases are known, printed instructions are sent and the sufferers are visited as well. The difficulty in most cases is the suspicion that if cases are notified the Health Officer will interfere with work. Under certain conditions, of course, this might be necessary, if the patient were engaged say in the preparation of food stuffs.

No hospital accommodation is provided *per se* for Tuberculosis, but under certain conditions incipient cases can be received for a short period in the Small Pox Hospital (which is not now and never has been used for that disease). No cases have yet been received.

BIRTHS.

During 1908 537 births were registered, a number in excess of last year. Of this number 22 were illegitimate, equal to 4 per cent. of the whole. This is a considerable increase on last year's number, and is in excess of the average, 2·8, for the four previous years. The total number of births, as can be seen in Table 1, is much above the average for the last ten years.

The Distribution and Rates for each portion of the Borough and for the whole are as under :—

		Males.	Females.	Total.	Rate per 1000.
Weymouth	...	165	165	330	= 28
Melcombe Regis	...	117	90	207	= 17·5
		282	255	537	= 22·7

The great disproportion in the Rates between the two portions of the Borough still continues. The Birth Rate, as a whole, is considerably under that of England and Wales which is 26·5.

DEATHS.

The total number of Deaths registered in the Borough is 309, equal to an uncorrected death rate of 13 per 1000. Both are slightly less than last year, though an increase on the 10 years' average.

The true or corrected death rate, which is arrived at by deducting the deaths of such non-residents as die in Public Institutions in the district—these number 19—and adding the deaths of residents who may die in Public Institutions outside the district—these are 13 in number. These give us 303 as the corrected number, and a rate of 12·8 per 1000. This is the same as last year, but is a decrease on the 6 years' average. The rate for England and Wales is 14·7. (Figures are not available for a corrected death rate prior to 1902).

There have been 11 deaths certified by the Coroner. One death was uncertified. As in the previous year the increase in the number of deaths is mainly noticeable in the age periods 5 to 15 and 15 to 25, and is due to Tubercular Diseases to a great extent, and, this year also, to deaths from Scarlet Fever and Diphtheria. As these are diseases in which such sanitary measures as fresh air and sunshine, cleanliness, and perfect sanitation are the principal preventive measures, it clearly points,

together with the incidence of infectious diseases, to a continuance and increase of those active measures, already in progress to combat the prevalent sloth and negligence towards these essentials to life.

INFANTILE DEATHS.

There were 50 deaths of infants under one year of age, equal to a rate of 93 per 1000 births registered.

Any rate which consists of only two figures may be considered a favourable one, and this year's is the third lowest recorded. Until the month of December, when there was a greater number of infantile deaths than usual, the rate had kept at the lowest recorded, about 76 per 1000. The number of illegitimate infants dying is four, equal to a rate of 181 per 1000 illegitimate births, a decrease on last year.

On analysing the Mortality Table we find that 44% of the deaths occur during the first month, whilst 26% of the whole occur during the first week, 16% occur during the first 24 hours of life, and 10% during the first fifteen minutes.

This latter accounts, in some manner, during the last few years, and since the introduction of the Midwives Act, for a higher infantile death rate in proportion than formerly, as it so frequently happened under the old style of midwives, that such children were ignored as having lived, and pronounced still births. If such were excluded both as births and deaths the rate would be 84·4 per 1000.

There is an exact doubling this year (from 6 to 12) of deaths from Premature Birth, marasmus or wasting and debility from birth.

Diarrhœal diseases are slightly less than last year, and there is a continued though slight decrease on the series of years since Table V. was instituted.

There is a considerable increase this year for the first time in what are unclassified deaths. The majority of these have been due to a lack of explicitness in the death certificate given, which has not always been cleared up on further enquiry.

The continued reduction throughout the country in the birth rate has added a stimulus, if such were necessary, to the action taken towards the preservation of the lives of those who have come into the world.

The education of the mother is the first essential towards that end, and this has generally in the past been left to nature, and has not been found to be trustworthy. During the last two years strenuous efforts have been made to introduce a means of educating the mothers in their duties to their offspring, and as a preliminary step to this when the Notification of Births Act became law its adoption was proposed. The Sanitary Committee were unanimous for its adoption, but the opposition shewn in the Council caused the withdrawal of the Report. A second attempt was made at the close of the year, and a Health Visitor (a lady trained and certificated as a Nurse, Midwife, and Sanitary Inspector) having been appointed conjointly with the Education Committee, the Council, with one dissentient, accepted the adoption of the Act, and, it is hoped, that a beginning will be made early in 1909, to visit and instruct mothers in the care and feeding of their infants, etc.

MIDWIVES ACT.

There are 12 Midwives who gave notice of their intention to practice within the district.

Of this number 10 are registered under "prior practice," and two under certificates of an examining body.

The majority of the Midwives registered under "prior practice," are uneducated, and have received practically no training, in some cases their want of knowledge leading them to contravene the rules of the Board.

When visited at their homes, the midwives were found to be personally clean, and their houses well kept, and in good condition.

On inspection, bags completely fitted, clean, in good condition, and containing a washable lining as required by the Rules of the Central Midwives Board, numbered three.

Bags incompletely fitted with the required appliances, and containing washable lining, firmly sewn in, and in an indifferent state of cleanliness, numbered three, whilst two bags were unlined, and in a dirty state.

The remaining four midwives kept neither bag, instruments, or register of cases.

This is in direct contravention of the rules, which require a midwife, when called to a confinement, to take with her in a bag or basket, furnished with a washable lining, certain appliances, including a thermometer, also an efficient antiseptic.

In five cases only was a thermometer found included in the necessary outfit, and this too, when it is so essential that Medical Aid should be obtained in time to save a valuable life.

The registers of cases are fairly well kept, the chief fault being that they are not filled in up to date, and in a small number of cases no register is kept.

In accordance with rule 21, the Act requires the midwife to send notice to the Local Supervising Authority when she has to send for Medical aid, also in cases of still births where a Medical Practitioner is not in attendance.

One Midwife was found to have sent for Medical aid three times, and also had a still birth in her practice which she failed to notify. Still another Midwife had six still births occurring in her practice, and which she failed to notify to the Local Supervising Authority. One case of Puerperal Fever occurred and was not notified.

Taking the Midwives on the whole, and making allowance for the disadvantages which they suffer from in regard to want of proper training, etc., and in some cases poverty, there is an

improvement all round on the previous year, and I hope with further instruction, such as the use and the reading of the thermometer, etc., and the importance of observing strict cleanliness in all matters of midwifery, that there will be a still greater improvement during the year.

NURSE LETHBRIDGE, C.M.B.

FACTORY AND WORKSHOPS ACT.

There are 40 Factories and 230 Workshops and Domestic Workshops in the district, with some 40 Workplaces, all of which have been inspected.

340 visits have been paid under the F. and W. Act, and 23 written notices issued to remedy defects. The great bulk of the notices are divided between want of cleanliness—in most part neglect of lime washing—and insufficient sanitary accommodation. Under the F. and W. Act 1901, every Workshop and Factory must be provided with sufficient and suitable Sanitary accommodation. The standard of sufficiency and suitability enforced, or attempted to be enforced, is that each w.c. must be provided with a water supply for flushing purposes, and that the place provided must be in accordance with the Bye-laws. Steady and continued pressure is being exerted to bring all into conformity. Bakehouses were started with, and at the close of this year all are now remedied.

MILLINERS, DRESSMAKERS, and others employing female labour were re-inspected by the Lady Sanitary Inspector, and her report is to the effect that the “conditions found were good, and in accordance with the Act,” but that “The sanitary conditions of some of the premises required remedying.”

LAUNDRIES. Under the 1907 Act the number of Laundries has been considerably increased. Formal notices were

issued early in the year calling attention to the Act and requiring those now coming under it to register their places. One Hotel Laundry gave notice but no others. During the course of enquiry into infectious cases, many laundries came under notice and some six others have been added to the Register. There is little doubt that many more still exist.

The conditions of those previously on the register are fairly satisfactory, floors are good, and the drainage is sufficient, the heating of irons has been removed from the ironing rooms.

Those added during recent months to the Register will require attention being paid to the floors and drainage. One has already been thoroughly remedied.

TAILORS' WORKSHOPS are as formerly, deficient in free ventilation, not from structural defects as a rule, but from the inherent prejudice of the men generally against fresh air. Every opportunity is taken of closing up both inlets and exits.

BAKEHOUSES. These number 38, and generally speaking there is a continuance of the improvement noticeable last year, both as regards cleanliness and free ventilation.

Three Workshop Bakehouses have during the year been converted into Factory Bakehouses by the installation of electric motor power, and the change has not been without benefit to the sanitary condition of the places. Nine notices to limewash bakehouses were served and carried out.

WORKPLACES. An inspection of all restaurant kitchens was made during the year, and these were in general found satisfactory.

One prosecution for insanitary premises was instituted against a Mineral Water Manufacturer, but after an adjournment was withdrawn, the premises being closed as such and a new factory built.

One most insanitary Domestic Workshop is under notice at the end of the year.

Three Statutory Notices under the F. and W. Act were issued and all have been complied with.

HOME WORKERS.

The Home-work order of May 23rd, 1907, requires that where work of certain kinds is given out to a workman or contractor to be done outside the factory or workshop, a list of all such persons to whom work is sent out shall be kept, and that a copy of the list shall be sent to the Local Authority not later than February 1st and August 1st in each year.

The difficulty of having the lists of such forwarded still continues. To obviate this the plan has been adopted of forwarding a list to each likely employer of such, immediately before the dates of delivery, with the request that they should be filled in and returned, even then in nine cases further written application was made before the lists were received.

41 Lists have been received from 21 employers, and 61 inspections of home-workers' premises have been made during the year. The number of home workers employed is given as 51.

On an inspection of home workers' premises, sanitary defects were found to exist in six instances and notices were served to remedy same, which have been complied with.

STAFF OF THE HEALTH DEPARTMENT.

In last years' Report comment was made on the paucity of the Staff in the Department and that despite the enormous increase in the work, due to the higher standard of efficiency now requisite, and to the additional duties thrown upon it by the many new Acts of which the past few years have been so prolific, it had remained as formerly.

In November an addition was made, jointly with the Education Committee, and in view of the Notification of Births Act, by appointing a Female Sanitary Inspector and Health Visitor, and certain duties, such as Midwives' Inspection and those pertaining to female workers, have been relegated to this officer.

A regrettable occurrence in connection with the Inspector of Nuisances and his immediate subordinates, has had a prejudicial effect upon the work of the year.



TABLE I.—Vital Statistics of Whole District during 1908 and previous years.

Name of District—Borough of Weymouth and Melcombe Regis.

Year.	Population estimated to Middle of each Year.	Births		Total Deaths Registered in the District.				Deaths of Non-resid'ts registered in Public Insti- tutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	Net Deaths at all Ages belonging to the District.		
		Number	Rate.*	At all Ages.		Total Deaths in Public Institutions in the District.	Number.			Rate.*		
				Under 1 Year of Age.								
				Number.	Rate per 1000 Births registered.							
1	2	3	4	5	6	7	8	9	10	11	12	13
1898	19,250	463	24.0	57	120.9	259	13.4	34	...	...	...	...
1899	19,464	481	24.7	76	158.0	345	17.7	49	...	...	...	...
1900	19,680	483	24.5	41	84.8	287	14.5	42	...	...	...	...
1901	19,897	518	26.0	59	113.8	303	15.2	41	...	...	...	...
1902	20,133	480	23.8	41	85.4	269	13.3	38	12	6	263	13.0
1903	20,336	507	24.9	67	132.1	312	15.3	52	25	5	292	14.3
1904	20,560	496	24.1	54	106.8	307	14.9	65	26	2	283	13.7
1905	20,788	548	26.3	55	109.3	335	16.1	51	24	5	316	15.2
1906	23,300	511	21.9	53	103.7	292	12.5	45	23	10	279	12.0
1907	23,300	508	21.8	53	104.3	311	13.3	56	19	7	299	12.8
Averages for years 1898-1907	20,670	499	24.3	55	111.9	302	14.6	47	21	5	288	13.5
1908	23,600	537	22.7	50	93	309	13	62	19	13	303	12.8

* Rates in Columns 4, 8, and 13 calculated per 1,000 of estimated population.

Area of District in acres (exclusive of area covered by water).	1305½ acres	Total population at all ages...	...	19,843	At Census of 1901.
		Number of inhabited houses	...	3,881	
		Average number of persons per house	...	5.1	

I. Institutions within the District receiving sick and infirm persons from outside the District.	II. Institutions outside the District receiving sick and infirm persons from the District.	III. Other Institutions, the deaths in which have been distributed among the several localities in the District.
Union Workhouse Princess Christian Hospital Royal Hospital Eye Infirmary Military Hospital, Red Barracks	Borough Isolation Hospital, Chickerell County Asylum, Dorchester	St. George's Hospital, London

Is the Union Workhouse within the District? *Yes.*

TABLE II.—Vital Statistics of Separate Localities in 1908 and previous Years.

Name of District—Borough of Weymouth and Melcombe Regis.

Names of Localities.		1.—Weymouth.				2.—Melcombe Regis.			
Year		Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 Year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 Year.
		<i>a.</i>	<i>b.</i>	<i>c.</i>	<i>d.</i>	<i>a.</i>	<i>b.</i>	<i>c.</i>	<i>d.</i>
1898	...	...	...	...	...	...	...	...	...
1899	...	...	...	...	...	...	...	...	...
1900	...	...	...	...	...	...	...	...	...
1901	...	...	...	...	...	...	...	...	...
1902	...	10,177	..	140	...	9,956	...	123	...
1903	...	10,372	311	167	44	9,964	196	125	23
1904	...	10,486	319	145	26	10,074	177	138	27
1905	...	10,626	358	178	48	10,162	190	138	7
1906	...	11,800	328	150	31	11,500	183	129	22
1907	...	11,800	310	168	33	11,500	198	131	20
Averages of years 1902 to 1907		10,876	323	158	36	10,524	188	130	19
1908	...	11,795	330	157	27	11,805	207	146	23

TABLE III.—Cases of Infectious Disease notified during the Year 1908.

Name of District—Borough of Weymouth and Melcombe Regis.

Notifiable Disease.	Cases notified in Whole District.							Total Cases notified in each Locality.		Number of Cases removed to Hospital from each Locality.		Total cases removed to Hospit'l
	At all Ages.	At Ages—Years.						1	2	1	2	
		Un-der 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 & up-ward.	Wey-mouth.	Mel-combe Regis.	Wey-mouth.	Mel-combe Regis.	
Small-pox ...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria includ'g Membranous croup	10	...	4	6	...	...	...	4	6	4	6	10
Erysipelas ...	2	...	...	...	...	2	...	1	1	...	...	...
Scarlet Fever ...	143	...	26	109	5	4	...	110	33	108	33	141
Typhus Fever ...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever ...	2	...	...	...	...	...	...	1	1	...	...	...
Relapsing Fever...	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever...	...	...	...	...	...	...	...	...	...	...	...	...
Plague ...	...	...	...	...	...	...	...	...	...	...	...	...
Phthisis ...	...	...	...	...	...	...	...	...	...	...	...	...
Totals ...	157	...	30	115	5	6	...	116	41	112	39	151

Isolation Hospital—Chickerell.

TABLE IV.—Causes of, and Ages at, Death during Year 1908.

Causes of Death.	Deaths at the subjoined Ages of "Residents" whether occurring in or beyond the District.						Deaths at all Ages of 'Residents' belonging to Localities, whether occurring in or beyond the District.		Total Deaths whether of 'Residents' or 'Non-residents' in Public Institutions in the District.	
	All Ages.	Under 1 Year	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards	Weymouth		Melcombe Regis.
Small-pox	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	..	..	..	..	..
Scarlet Fever	6	..	2	4	..	..	..	4	2	..
Whooping-cough...	4	3	1	..	..	..	..	2	2	..
Diphtheria including Membranous croup	2	..	1	1	..	..	..	1	1	..
Croup	..	..	..	..	..	..	..	..	..	..
Fever { Typhus ...	..	..	..	..	..	..	..	..	..	..
Enteric ...	..	..	..	..	..	..	..	..	..	..
Other continued	..	..	..	..	..	..	..	..	..	..
Epidemic influenza	..	..	..	..	..	..	..	..	..	..
Cholera	2	..	..	..	..	1	1	..	2	..
Plague	..	..	..	..	..	..	..	..	..	..
Diarrhoea	3	2	..	..	..	..	1	..	..	..
Enteritis	3	3	..	..	..	..	..	1	2	1
Puerperal fever	..	..	..	..	..	..	..	..	..	..
Erysipelas...	1	..	..	..	1	..	..	..	1	1
Other septic diseases	..	..	..	..	..	..	..	..	..	..
Phthisis (Pulmonary Tuberculosis)	22	..	..	1	3	16	2	13	9	6
Other tubercular diseases	7	3	2	1	..	1	..	4	3	..
Cancer, malignant disease	22	..	..	..	1	16	5	11	11	6
Bronchitis...	14	2	1	..	..	1	10	7	7	2
Pneumonia	21	3	7	..	2	6	3	13	8	3
Pleurisy	1	..	..	..	1	..	..	1	..	..
Other diseases of Respiratory Organs...	7	1	2	..	..	3	1	4	3	..
Alcoholism	..	..	..	..	..	2	1	1	2	..
Cirrhosis of liver	3	..	..	..	..	..	..	..	..	..
Venereal diseases...	..	..	..	..	..	..	..	..	..	..
Premature birth	8	8	..	..	..	..	..	5	3	..
Diseases and accidents of parturition	3	..	..	..	..	3	..	1	2	1
Heart diseases	29	..	1	1	..	10	17	16	13	5
Accidents	7	1	..	1	2	2	1	2	5	..
Suicides	3	..	..	..	2	1	..	1	2	1
All other causes	135	24	4	2	4	39	62	69	66	36
All causes	303	50	21	11	16	101	104	157	146	62

TABLE V.—Infantile Mortality during the Year 1908.—Deaths from stated Causes in Weeks and Months under One Year of Age

CAUSE OF DEATH.		Under 1 week	1—2 weeks	2—3 weeks	3—4 weeks	Total under 1 month.	1—2 months	2—3 months	3—4 months	4—5 months	5—6 months	6—7 months	7—8 months	8—9 months	9—10 months	10—11 months	11—12 months	Total Deaths under 1 Year
All causes	<div>Certified</div> <div>Uncertified</div>	13	4	3	2	22	5	6	1	2	5	1	3	1	1	1	2	50
I. Common Infectious Diseases	<div>Small-pox</div> <div>Chicken-pox</div> <div>Measles</div> <div>Scarlet fever</div> <div>Diphtheria: Croup</div> <div>Whooping cough</div>	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
II. Diarrhoeal Diseases	<div>Diarrhoea, all forms</div> <div>Enteritis, Muco-enteritis, Gastro-enteritis</div> <div>Gastritis, Gastro-intestinal Catarrh...</div>	...	...	...	...	...	1	1	...	1	1	...	1	...	...	...	...	3
III. Wasting Diseases	<div>Premature Birth</div> <div>Congenital defects</div> <div>Injury at birth...</div> <div>Want of breast-milk, starvation</div> <div>Atrophy, debility, marasmus...</div>	6	...	1	...	7	1	...	...	...	...	...	...	...	...	...	...	2
IV. Tuberculous Diseases	<div>Tuberculous meningitis</div> <div>Tuberculous peritonitis: Tabes mesenterica</div> <div>Other tuberculous diseases</div>	6	2	1	...	9	1	2	...	...	...	1	...	1	...	...	...	14
V. Other causes	<div>Erysipelas</div> <div>Syphilis</div> <div>Rickets</div> <div>Meningitis (not tuberculous)</div> <div>Convulsions</div> <div>Bronchitis</div> <div>Laryngitis</div> <div>Pneumonia</div> <div>Suffocation, overlying</div> <div>Other causes</div>	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7

Population (estimated to middle of 1908), 23,600.

Births in the year: Legitimate 515; illegitimate 22.

Deaths in the year of Legitimate Infants, 46; Illegitimate Infants, 4.

Deaths from all Causes at all Ages 103

TABLE V a. - THEATRE MOTIVELY ATTRACTING WHO TO 1000. DEATHS FROM STAGE CAUSES IN WEEKS AND MONTHS UNDER ONE YEAR OF AGE

[illegible]

District (or sub-division) of WEYMOUTH.

Population (estimated to middle of 1908), 11,795.

Births in the year : 330

Deaths in the year of Infants, 27

Deaths from all Causes at all Ages, 157.

TABLE Vb.—Infantile Mortality during the Year 1908.—Deaths from stated Causes in Weeks and Months under One Year of Age

CAUSE OF DEATH.		Under 1 week	1—2 weeks	2—3 weeks	3—4 weeks	Total under 1 month.	1—2 months	2—3 months	3—4 months	4—5 months	5—6 months	6—7 months	7—8 months	8—9 months	9—10 months	10—11 months	11—12 months	Total Deaths under 1 Year
All causes	Certified	6	2	..	..	8	4	2	1	..	3	..	2	1	1	..	1	23
	Uncertified	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
I. Common Infectious Diseases	Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Measles...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Scarlet fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Diphtheria : Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
II. Diarrhoeal Diseases	Whooping cough	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1
	Diarrhoea, all forms	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1
	Enteritis, Muco-enteritis, Gastro-enteritis	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1
III. Wasting Diseases	Gastritis, Gastro-intestinal Catarrh...	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1
	Premature Birth	2	..	..	..	2	1	..	..	..	..	..	..	..	..	..	..	3
	Congenital defects	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Injury at birth...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
IV. Tuberculous Diseases	Want of breast-milk, starvation	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	1
	Atrophy, debility, marasmus...	..	..	..	..	3	..	1	..	..	..	..	..	..	..	..	..	5
	Tuberculous meningitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Tuberculous peritonitis : Tabes mesenterica	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
V. Other causes	Other tuberculous diseases	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Erysipelas	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Syphilis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Rickets...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Meningitis (not tuberculous)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
	Convulsions	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
	Bronchitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
	Laryngitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
	Pneumonia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
	Suffocation, overlying	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
	Other causes	..	..	..	..	1	1	..	1	..	1	..	..	..	..	..	..	4

Factories, Workshops, Laundries, Workplaces, and
Homework.

1.—Inspection.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises.	Number of		
	Inspections	Written Notices.	Prosecutions
Factories (Including Factory Laundries	70	4	1
Workshops (Including Workshop Laundries)	290	16	...
Workplaces (Other than Outworkers' premises included in Part 3 of this Report)	60	3	...
Total	340	23	1

2.—Defects Found.

Particulars	Number of Defects.			Number of Prosecutions
	Found	Remedi- ed	Refer'ed to H.M. Inspec'r	
<i>Nuisances under the Public Health Acts--</i>				
Want of cleanliness	16	16	...	...
Want of ventilation ... ..	...	...	...	...
Overcrowding	1	1	...	...
Want of drainage of floors ... ..	...	...	...	...
Other nuisances	3	2	...	...
Sanitary accommodation { insufficient	11	5	...	...
{ unsuitable or defective	4	2	...	...
{ not separate for sexes ... ..	...	...	...	...
<i>Offences under the Factory and Workshop Act—</i>				
Illegal occupation of underground bakehouse (s. 101)... ..	...	...	...	...
Breach of special sanitary requirements for bakehouses (ss. 97 to 100) ... ..	...	...	...	...
Other offences (excluding offences relating to outwork which are included in Part 3 of this Report)	...	...	...	...
Total	35	26	...	...

3.—Home Work.

Nature of Work	Outworkers' Lists, Section 107.										Outwork in unwholesome premises, Section 108.			Outwork in infected premises, Sections 109, 110.			
	Lists received from Employers					Address' es of		Prosecutions			Inspec- tions of Out- workers' premises	In- stances served	Prose- cutions (S. 110)	In- stances	Orders made (S. 110)	Prose- cutions (Sec- tions 109, 110)	
	Twice in the year		Once in the year			Address' es of Out- workers received from other Council's	Address' es of Out- workers sent to other Council's	Failing to keep or permit inspection of lists	Failing to send lists								
	Outworkers		Outworkers														
	Con- tractors	Work- men	Con- tractors	Work- men	Con- tractors					Work- men							
Wearing apparel—																	
(1) making, &c. ...	39	8	116	1	1	...	...	...	...	59	6	6	1	...	...	...	...
(2) cleaning and washing
Lace, lace curtains and nets
Artificial flowers
Nets, other than wire nets
Tents
Sacks
Furniture and Upholstery	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
Fur pulling
Feather sorting
Umbrellas, &c.
Carding, &c., of buttons, &c.
Paper bags and boxes
Basket making
Brush making
Racquet and tennis balls
Stuffed Toys
File making
Electro-plate
Cables and chains
Anchors and Grapnels
Cart Gear
Locks, latches and keys
Pea picking
Total	38	8	116	1	1	...	...	...	...	61	6	6	1	...	...	...	...

Notices served on Occupiers as to keeping or sending lists : 9

4.—Other Matters.

Class.	Number
Matters notified to H.M. Inspector of Factories :—	
Failure to affix Abstract of the Factory and Workshop Act (s. 133)	1
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s. 5)	4
Other	4
Underground Bakehouses (s. 101) :—	
Certificates granted during the year ... ..	...
In use at the end of the year	2

Education (Administrative Provisions) Act 1907.

ANNUAL REPORT

ON THE

ELEMENTARY SCHOOLS

OF THE

BOROUGH OF WEYMOUTH & MELCOMBE REGIS,

FOR THE YEAR 1908.

W. B. BARCLAY, L.R.C.P., D.P.H., Etc.,
School Medical Officer.

WEYMOUTH :
HARRY WHEELER, LTD.,
PRINTERS.

To the
Chairman and Members of the Education Committee
of the Borough of Weymouth and Melcombe Regis.

In accordance with the Education (Administrative Provisions) Act 1907, I have the honour to present to you my first Annual Report as School Medical Officer. In a Memorandum issued by the Local Government Board of date Dec., 1907, and dealing with the Annual Reports of Medical Officers of Health, a special section is devoted to Medical Inspection of School Children, and it is there stated : “It is anticipated that in most districts the work will, in accordance with the advice of the Board of Education, be carried out in conjunction with that of the Medical Officer of Health, or at least under his supervision. Where the Medical Officer of Health is also School Medical Officer it may be convenient that the Annual Report which he is required to make in the latter capacity should be issued together with his Annual Report on the health of his district.” A further paragraph states “Special attention should be given to the particular section of the Memorandum of the Board of Education entitled “Organisation,” with which the Local Government Board are in full agreement as illustrating the inter-relations of Sanitary Authority and Education Authority that deserve fostering and development.”

In the Memorandum of the Board of Education of date Aug. 17th, 1908, the scope of the Annual Report required of the School Medical Officer is given thus : “The Board consider that it is desirable that it should deal with the whole subject of School Hygiene, and should cover as much as possible of the ground indicated under the following heads.” The Memorandum then gives 10 separate headings designated a, b (1, 2, 3, 4), c (1, 2, 3, 4, 5), d, e, f, g, h, i (1, 2, 3), j.

Acting, therefore, under these very explicit instructions I shall endeavour as briefly as possible to comply with them, and where repetition of matters dealt with in my report as Medical Officer of Health is unavoidable, shall simply refer to them under their heading in that report.

It has been abundantly evident during the past year that the division of the School Medical Officer and the Medical Officer of Health would have been fraught with the most serious consequences both to the schools and to the public health. The wisdom of the Authorities in urging the correlation of the two services wherever possible, and in all cases at least for the Medical Officer of Health to be the supervising authority has been amply borne out here, and I have no doubt that the same will be shewn in every district. The organization of the work of medical inspection being an entirely new departure occupied a considerable time, and an actual commencement of the systematic inspection was not made until May. Owing to holidays intervening a stop was made during the month of June, but in July the work was seriously started and carried on without intermission from that date during the whole period the schools have been open. Until the beginning of November the whole of the work had to be done by the Medical Officer, with the assistance of the Teachers, which was most willingly given, but which I knew was throwing a severe strain upon their already overtaxed time, as it was doing upon mine. On November 2nd a school Nurse took up duty and certain duties belonging to that functionary were delegated to her, relieving the others and allowing them to keep more strictly to their proper spheres.

It will be seen from the report that the work is much greater than appeared at first sight and if carried to its ultimate conclusions will be greater still, and that though much has already been done to remedy or alleviate defects shewn in the course of examination, very much has remained unattended to from lack of means of dealing with them. It is useless to proceed to discover physical defects and record them without providing means to deal with those who are unable or unwilling to themselves provide the means of alleviation.

(a). "General review of the hygienic conditions prevalent in the Schools in the area of the Local Education Authority in respect of such matters as surroundings, ventilation, lighting, warming, equipment, and sanitation, including observations, on the type and condition of sanitary conveniences and lavatories, water supply for washing and drinking purposes, the cleanliness of schoolrooms and cloakrooms, arrangements for drying children's cloaks and boots, and the relation of the general arrangements of the School to the health of the children."

ST. JOHN'S SCHOOLS.

GIRLS' SCHOOL. Cloak Room accommodation sufficient, but no means provided for drying clothing in wet weather, and hooks are too crowded, every alternate hook could be removed with advantage.

CLASS ROOM on the right or North side of the entrance. This has three Tobin's Tubes provided for air inlets, but one of these has no visible connection with the open air; the only exits for vitiated air are two louvres in the roof, these being small and covered with wire gauze are practically useless; some more efficient means should be provided. The plaster of the ceiling is broken. The desks are long, and the light falls from the rear and right side. An improvement to this room would be the provision of further hopper windows. The heating is sufficient.

CLASS ROOM, South and East side. This is of more modern construction than the remainder of the school, and the provision for ventilation is sufficient and acts well. The heating of the room is very defective, and a stove at the opposite end from the fire-place is really a necessity. The desks are of a type that cannot be recommended. Light falls from the rear and the left.

MIDDLE CLASS ROOM. The ventilation of this room is defective, being by windows only, and the exits are as in the North Class Room, and practically useless. The addition of some hopper windows or sheringham valves, or other form of inlets not dependent entirely on the state of the weather, with

some roof extractors, is required. As in the other rooms, the desks are of an ancient pattern. The light is now from the left.

WEST CLASS ROOM. The ventilation is as in the other portion above mentioned, and the same additions are required. Desks long. Light from the left and in front. The cloak room accommodation for this part of the School is sufficient, also the sanitary accommodation, and the number of lavatory basins; these latter however are of the most primitive style, and should at a very early date be replaced with something more modern and with provision for overflow.

INFANTS' SCHOOL. MAIN ROOM. The inlets for fresh air are sufficient, but are all on one side of the room, with the exception of a window behind the teacher's desk, this can rarely be kept open, and the provision of a hopper window here or of a Tobin's tube alongside would be a great improvement. The exits are louvres in the roof, and are insufficient. The heating here is very defective. The desks are fairly modern, and the light is from the left and sufficient. No lavatory accommodation is provided for the children. The sanitary arrangements are at a distance and are sufficient. At least two large roof exits are required, and some provision for children's ablutions, also more heating. The cloak room accommodation is insufficient, dark, and too narrow, with the hooks too close together, and no provision for drying the clothing when wet, all of which should be remedied.

INFANTS' CLASS ROOM. Inlets for fresh air are by swing windows, unavailable in many states of the weather, and by two gratings at floor level, which give rise to draughts against the children's feet and legs. There are no exits for vitiated air. The desks are quadruple, and the light is from the rear and the left. The heating is sufficient when the fire is lit early enough in the morning. Hopper windows, Sheringham valves, or Tobin's tubes are required for inlets, with a roof extractor. The small gallery in the room might be removed with benefit.

At the North end of the Infants' room, the ventilation shaft to the drains requires a wire cage provided, and one rain water

shoot joins the drains direct, this latter should be made to discharge over a stone ware gully trap.

The ashpit in this playground is an insanitary arrangement, and should be replaced by movable covered iron bins.

Considerable improvement is noticeable in the Infants' School since my last report, but much more requires to be done in both Infants' and Girls' Schools to bring them up to modern requirements.

BOYS' SCHOOL. NORTH CLASS ROOM. This room, as practically all the other rooms of the Boys' School, is underneath the Girls' and Infants' Schools, and is also on one side underground, so that the means for ventilation must of necessity be considered from this point of view, and any recommendations made can only tend to mitigate an evil that cannot be cured. A considerable portion of this School may be likened to a back-to-back dwelling.

The inlets may be considered sufficient for ventilation, but the exits ought to be considerably increased in number. The desks are long, and the light falls from the rear. I have strongly advised a change of position as regards the sitting arrangement, but this is impossible with the long desks, the room not being sufficiently wide enough to admit two desks, and to have one only would seriously curtail the number of scholars. The provision of modern desks of the duplex type, would remedy this, and be of general benefit for the posture of the boys.

MIDDLE CLASS ROOM. The lighting of this room has been improved since last year by the provision of an extra window, the above remarks apply equally to this portion, with the addition of deficient heating. A modern slow combustion fire (not a stove) of a fairly large size, would probably be sufficient.

SOUTH ROOM. East end of this room is very dark and has a platform (a useless incumbrance for a boys' school, if not a detriment). There is a roof ventilator at this end, carried through the girls' school above, the inlets may be considered

sufficient, but further exits are required. The desks are long, and in consequence the sitting arrangements only allow in one portion of the room for the light to fall from the left. A wall outside this room cuts off a great portion of the light. Were this removed, and an open railing substituted, it would be a considerable improvement. There is only one fire-place which seems insufficient for the space to be heated.

The WESTERN CLASS ROOM is similar as regards ventilation, and in other respects.

The Cloak Room accommodation is sufficient, but dark and badly ventilated, and no provision is made for drying damp clothing.

The Lavatory accommodation is insufficient, and unsuitably situated. The Sanitary accommodation is sufficient, and in good order.

The surface water drainage of this portion of the School has been renewed in the most modern and approved style.

The Cleansing of the School daily is of the ancient or primitive type, *i.e.* it consists of dry sweeping, without previous damping of the floor, in consequence clouds of dust arise and settle on all projections, desks, etc., and though afterwards dusted with a dry duster, it only causes a disturbance, to settle elsewhere. As has been pointed out on previous occasions, there is no greater disseminator of disease than dust, and this method of cleansing is one tending to propagate infectious and contagious diseases. Attention has had to be called during the year to the late period at which the fires have been lit in the mornings. This however has been remedied by the Managers. Much has been done since my last report to improve the hygienic conditions of this School generally, and the Managers are to be congratulated on their attempt to realize the ideal with the means at their disposal.



ST. MARY'S SCHOOLS.

GIRLS'.—LARGE ROOM. Cloak Room accommodation is inconvenient and insufficient; it is much too narrow, and both

at entry and exit of the pupils clothing is knocked down and trampled upon ; the hat pegs are too close together, the garments hang against the brick or stone wall and receive damp from condensation and in wet weather. The floor surface is irregular and without proper falls to carry off any water deposited upon it. Two lavatory basins are provided at one end, these are entirely insufficient, and being in a cul de sac are of little use. No means are provided for drying the clothing in wet weather. An umbrella stand of ample proportions is provided : it however materially contracts the already limited space of the cloak room.

Ventilation is by means of windows high up and by six Tobin's inlets on the opposite wall. These should be sufficient, but in a former report I stated that after careful testing under the most advantageous circumstances, the current of air entering these was scarcely perceptible. In wet weather these are the only inlets. Exits for foul air are windows at either end, so arranged as to act more as inlets, but under the most favourable circumstances entirely insufficient.

The walls are oil painted some seven feet high, above that calcarium, all in good order, but the woodwork has not been done recently, and the contrast is marked. Some bookcases in the room have not been moved for a considerable period and the wall behind is in a dirty condition and a harbour for dust.

Desks are principally of an old type, long, with a few quadruple seated.

The scholars principally sit with the light from the left ; I have recommended that all should do so. One end of the room is insufficiently lighted.

The heating of the room is defective—there is a difficulty in securing, except in mild winters, a reasonable temperature.

CLASS ROOM. Cloak room accommodation is similar to the large room, but one wall being against a baker's oven, the place is sufficiently dry and warm, uncomfortably so in hot weather, and the smell of the baking is at times an annoyance.

The north wall is damp, caused by a broken rain water gutter.

Ventilation is by four open gratings 18 inches above the floor level, and opening direct through to the open air, allowing a cold current to impinge upon those seated near ; the external openings of these are in a builder's yard, and are to a great extent blocked by a heterogeneous collection of dirty building material, and are to be decidedly condemned. The only exits are in the roof and are of primitive and inefficient construction, only one opening by louvres direct to the open air.

The floor is in bad condition and will shortly require renewal. When this is done it ought to be brought to the same level as the main room.

The heating is by means of one open fireplace, but this room is generally sufficiently warm from the proximity of the bake-house. The desks are of the long variety. The painting is similar to the main room.

The recommendations for this school are : To provide more efficient inlets and exits for ventilation purposes, make all bookcases and cupboards easily movable for sanitary purposes, enlarge, improve, and provide means for drying clothing, in the cloak rooms, and provide further means of heating the main room. When desks are renewed they should be either single or double seated.

INFANTS' SCHOOL.—LARGE OR MAIN ROOM. Cloak room accommodation is similar to the girls' department but is more meagre, many of the hooks or pegs are too high for the infants. No lavatory accommodation is provided.

The remarks as to painting and to cupboards or bookcases are similar to the girls'.

The high platform in this room is a serious defect, and has repeatedly been called attention to ; it is used for a store room underneath, and is grossly insanitary for a school. The inlets for fresh air are by gratings 18 inches from the floor, as in the girls' class room, and are not to be recommended. There are no

exits provided for the polluted air. The block floor in this room does not meet the wall and dirt accumulates in the crevice.

CLASS ROOM.—The painting and bookcases are similar to the other portions of the school. Ventilation is by means of windows only and not available in rough weather. Twelve rain water shoots discharging directly into the drain and therefore acting as ventilators open on the level of and in close proximity to the windows. The roof leaks in two places. The cloak room accommodation is within the room and is to be condemned. The door to Albert Terrace opens directly into the room. Heating is by means of a small stove and is very ineffective. A platform in this room is also most detrimental. Desks are of the long type, and all the children sit in a wrong direction, either facing or with their backs to the light.

The recommendations for this department are similar to the girls' portion, with the addition of removal of platforms from both rooms, and the providing of a lobby at the entrance from Albert Terrace, which could be used for a cloak room. Lavatory accommodation is required for the whole school.

The sanitary accommodation has been re-constructed at a recent date and is of modern and satisfactory construction, with sufficient water flush and cleansing power. The ventilation shaft to the drains, concerning which I called attention some two years ago, has not been altered, and still has its exit too close to the windows of adjacent buildings. The jointing of this shaft is of a very inferior type.

When reporting on the former sanitary arrangements, attention was called to the situation of these immediately under the windows of the Technical School. The new arrangement has rather tended to augment this unsatisfactory position as the only means of ventilation for the whole series is now right against the wall of this building, and any nuisance previously must now be greater, excepting for the more modern type. It seems a pity that when opportunity did occur, some expert advice was not taken as to change in the situation.

A mason's pit in the centre of the playground in an insanitary state still remains.

BOYS' SCHOOL. As this is practically within a short period of closure I need not repeat the report of last year, nothing having been done that could improve the sanitary condition. Some of the rain water shoots are broken, causing dampness in the walls.

I would urge that any re-construction of the girls' and infants' departments that may take place, in consequence of the expected closure of the boys' school, should be in the line of providing some means of thorough ventilation, and greatly improved cloak room and lavatory accommodation, both of which are sadly deficient.

The cleansing of these schools might be improved, sawdust is used to sprinkle the floors before sweeping, but is not used in an effective manner. Dust in rather thick layers is found on all projections and on the tops of all cupboards.

Some more efficient supervision over the school cleaners is much required, and disinfectants should be provided for the daily cleansing as much as for the yearly cleansing.

HOLY TRINITY SCHOOLS.

BOYS' SCHOOL. Cloak Room accommodation is sufficient. Two lavatory basins in one corner are not trapped inside, and have no provision for overflow; the Lavatory accommodation, consisting of these two basins, and one other in another part of the school, also untrapped, is insufficient for the number of pupils. There is no provision for drying damp clothing.

WEST CLASS ROOM. This is of more modern construction than the remainder of the school. Ventilation is by windows and one Tobin's tube, and may be considered sufficient, both as to inlets and exits. Walls have a dado of glazed bricks. Heating: one large fire-place, and seems sufficient. Floor of wood blocks, and has a two step gallery which can only be considered a

detriment. Desks are long: the main light falls upon them from the right. A Natural History cupboard in the room, though not a fixture, does not seem to have been moved out from the wall for a long period, and there is a considerable accumulation of dirt behind it.

MAIN ROOM. This room is divided into two unequal portions by a glazed partition extending to the height of the wall plates, and this allows of a cross current from the windows for ventilation purposes, the inlets being by two Hopper windows, and eleven swing windows, which in ordinary states of the weather may be considered sufficient; the exits are two small Boyle's extractors in the roof. Heating is by two fire-places, one in each portion, that in the larger seems insufficient for the size of the room. Desks are long, and the light falls upon them from the right and left; the light is rather dim in the smaller division. The cupboards in this room have not been moved and dirt has accumulated behind them.

EAST ROOM. This is also divided by a glazed partition to the height of the wall plates. The ventilation is by swing windows and one Hopper light, and by Boyle's extractors, which are sufficient in ordinary weather, but a further Hopper light in the West portion is very desirable. Heating is by a stove in the West portion; and by a fire, which is insufficient, in the East portion. Desks are long, and the main light in the West portion is from the front only, and is very dim, further light is much required in this part; in the East portion, the light is good, and falls from all sides.

CLASS ROOM. South and East. Ventilation is by windows only as to inlets, and by a Boyle's extractor in the roof. Some Hopper lights as in other rooms are very desirable. A three step gallery in this room is to be condemned. Desks are long, light falls from the left and the rear. Heating by a slow combustion grate seems sufficient. Remarks as to cupboards, as in other rooms.

Sanitary arrangements are recent and good. The playground is of tar paving, it is considerably worn near the rails separating it from the infants' part, allowing pools of water to collect.

GIRLS' SCHOOL. Porch or entrance extending through to the playground at the opposite end of the school is also the cloak room. The accommodation is sufficient, but for girls the hooks are too close together. One portion is rather dark, and an improvement would be to glaze the inner door and have a skylight provided for this part. A hall opening from this part is also used for a cloak room and for a lavatory, which consists of four wash basins, untrapped and without overflow. An improvement in this part allowing freer passage, would be to make a communication from the rear passage to the lavatory hall. There is no provision for drying wet clothing.

CLASS ROOM, South and West. This is of modern construction, and everything is good with the exception of the two step gallery. The desks are long : the light falls from the left.

CLASS ROOM, North and West. This is a large room and is generally divided by a screen. Ventilation inlets are by windows and hopper lights. There are no exits excepting four small swing windows near the roof. Some hopper lights in the lower windows to allow cross currents, and some Boyle's roof extractors would be an improvement.

Heating is by means of a small open fireplace and a small stove, and is not always sufficient. Desks are quadruple ; light falls from the left and the rear and also from the front through a borrowed light from north and east room.

CLASS ROOM, North and East. Ventilation is by swing windows and three hopper lights for inlets : the only exits are one small quatrefoil with shutter near the roof, and small louvres covered with perforated zinc or wire in the roof and a louvre in the gable. These are practically valueless, and two large roof extractors are a necessity, and an improvement would be further hopper windows on all sides to allow of free inlets in rough weather. Heating is by two stoves and a fireplace. The distri-

bution of the heating is not equal, the stove and fire giving too much in one quarter whilst another part of the room is not sufficiently heated. The moving of the stove to a position nearer the glazed division would, I consider, be of considerable benefit. Desks are long, and quadruple, and the light falls from all quarters.

All the cupboards in the girls' school have the same fault as in the boys' school, that is, have not been moved for a long period, allowing accumulations of dust behind them. The playground is asphalted and in good condition. An ashpit in one corner should be replaced by movable sanitary bins.

The sanitary arrangements are sufficient and good.

INFANTS' SCHOOL. Porch or entrance which is the principal cloak room is large, well lighted and ventilated ; number of hooks is sufficient but they are too closely placed on the hat stand in the centre, the removal of every alternate one, and the addition of a second stand is advisable. One lavatory basin in this portion is the sole means of ablution for teachers and scholars alike. No means are provided for the drying of wet clothing.

SOUTH CLASS ROOM. Modern built, ventilation good, heating good, desks quadruple, light falls from left and rear. A four step gallery is to be condemned. Two fixed cupboards in the room ought to have a sloping top to prevent accumulations of dust.

LARGE ROOM. Ventilation : inlets, 2 Tobin's tubes and by swing windows, these latter not available in rough weather. Exits, slits in the gable, four small roof louvres, and one small Boyle. As this is a very large room, further inlets available in all conditions of weather, and two further roof extractors are necessary. Heating is sufficient. Desks are quadruple and sextuple ; light falls from the right and rear. A five step gallery at one end is to be condemned.

WEST ROOM. Ventilation inlets : a grating at floor level, swing windows and hinge ditto. Further inlets are necessary.

Exits good, heating sufficient, cupboards not been moved for a long time. Desks seat five and are raised on a five step gallery, and cannot be recommended ; light falls from the left and front.

NORTH ROOM. Ventilation : inlets, swing and hinged windows only ; Exits—small roof louvres and one gable slit. Further inlets, Tobin's tubes or Hopper windows, are necessary. These should be fixed on the east side alone, as the north windows open over the sanitary conveniences. A Boyle's extractor in the roof is needful. Heating: by one fireplace, but complaint of room being cold in the winter. Cupboards as in the other rooms. Desks are long ; light falls from the rear. Two movable galleries in this room are to be particularly condemned.

Sanitary arrangements good, the only drawback being that they can only be reached through the classroom to the north or through the boys' playground.

During the summer vacation the whole of the drainage of Holy Trinity Schools was re-constructed, under the supervision of the Sanitary Staff. The plan of the drainage could not be improved upon, and the work was carried out in a most thorough and substantial manner, and to my entire satisfaction.

The cleansing of these schools leaves very much to be desired, being on the old dry sweeping method. Clouds of dust arise and settle everywhere, and the architecture being of the ecclesiastical type allows a huge accumulation at and above the wall plates. The influence of this upon epidemics is mentioned elsewhere.

ST. AUGUSTINE'S, WALPOLE STREET.

MAIN CLASS ROOM. Ventilation efficient, by Tobin's inlets and windows falling inwards, and by extractors. Desks are quadruply and doubly seated, and light falls from both sides. The heating is insufficient in the morning. This room is used for mixed classes, and mixed standards, which, from a medical point of view, is to be deprecated unless where unavoidable.

CLASS ROOM. Ground Floor. Ventilation is efficient, and as in former room. Desks are all four seated, and light falls from the left.

Cloak Room and Lavatory accommodation are good.

LARGE ROOM on first floor extending the whole length and breadth of the school. This is well ventilated in a similar manner to the ground floor, but is a much more bright and cheery room, and from this medical point of view, ought to be more in use. I would suggest dividing it into two by movable partition, and making it the principal class room, and prevent the admixture of infant and senior classes in the same room. The playground accommodation is slightly limited, but the surface is good and dry, and has proper falls. The Sanitary accommodation is good.

As in some of the other schools, the daily cleansing is at fault.

CROMWELL ROAD SCHOOLS.

BOYS'. As this School has only been built and opened a little over three years, it can be assumed that so far as Cloak Room and Lavatory accommodation are concerned that they are sufficient, and that means are provided for the drying of wet clothing. Heating and lighting, and desk accommodation are also good, the former by radiators and hot water pipes. The only discordant note that has to be struck is the means of ventilation. Early in the year after prolonged observation in all conditions of weather, temperature, and barometrical pressure, I was compelled to officially report that the ventilation generally was imperfect, but that the central class rooms were to a considerable extent defective. Particulars were entered into, and subsequent observation has not tended to modify these. I expressed the opinion then, that ventilation had been made subsidiary to architectural design and harmony. Some alteration has been made in the class rooms, by the removal of the flaps and gratings from the roof exits, but the effect is barely

susceptible. The system is wrong, of having lengthened tubes of right angular construction running towards a louvred pinnacle in the centre of the building, when efficiency and economy could have been secured by direct exits through the roof above. The whole subject requires careful consideration and consultation. Sanitary arrangements and drainage are good and sufficient. In the playground, a sloping bank of earth or clay, on the Cromwell Road side, should be concreted over, as the washings from this run on to the asphaltting, rendering it dirty and dusty, and blocking the gully traps and drains, and causing collections of water to lie.

GIRLS' SCHOOL. This occupies the whole of the first floor over the Infants' School, and is similar in construction to the Boys' School, and the remarks in all matters made as to the boys' school, equally apply to this, with the addition that the few Tobin's inlets for ventilation are even more ineffective than those in the boys'.

INFANTS' SCHOOL. Similar in plan and construction to both boys' and girls' departments, and in addition there is the fact that no roof exits are provided in this part. Some gratings appear in a corner of each room, but on inspection are found to be blocked up. A sloping bank in the playground is similar to that in the boys' school.

Sanitary arrangements and drainage are good for both girls' and infants' schools, but attention has been called to occasional back draughts from the fresh air inlet to the drains in the girls' school playground, causing a noxious effluvia. I have recommended a back draught preventer to be provided, but to the present it is not forthcoming.

The walls on the south and west sides of the whole of the schools shew considerable signs of damp penetrating, due to their greater exposure to the prevailing winds.

Apart from the ventilation and the few minor matters of omission mentioned above, these schools may be taken as a model upon which to found others that may be necessary in the future.

ST. PAUL'S SCHOOL. (Infants only).

The playground is in bad order, the earth being washed away in places, leaving it irregular. The ground in many parts is soft and clayey and partly grown over with grass. A small portion around the entrance has been tar-paved. This should be extended over the whole extent of the playground, and also extended to form a path to the latrines. The latrines for girls are situated at the back of the school premises and the pathway to these is particularly soft and dirty.

The two sets of latrines are badly ventilated and are not kept in a cleanly state.

The drains have been entirely re-laid and ventilated, but the inspection chamber is covered with earth and not easily accessible.

Lavatory basins, three in number of various types, are badly kept.

Cloak room accommodation (two rooms) is sufficient. There is no provision for drying clothing.

LARGE ROOM. Divided into two by a woollen curtain, which is to be condemned as being a habitat for dust, dirt, and deleterious germs.

Ventilation is sufficient, chiefly by Tobin's tubes and roof ventilators, louvres.

Lighting is poor, more so in the north portion. Heating by two stoves, is barely sufficient: the rooms are cold in frosty weather.

Desks are mainly of an ancient type, and are not suitable for infants. Some of a duplex type have been recently provided. Light falls from the sides and rear.

CLASS ROOM, North End. Ventilation is sufficient, heating is sufficient, light is sufficient, and falls from left and rear. A gallery consisting of five steep steps is in this room, the steps being used for the children's seats. The desks are fixed and are of the long type. The desks and seating arrangements are very

bad, and the gallery should at once be dispensed with, proper single or double desks being provided.

CLASS ROOM, South side. Not at present used, and is similar to the one on north side.

The floors of this school are only washed three times a year. The same occurs in nearly all the schools. The absolute minimum should be once a month for a thorough scrubbing.

As mentioned previously, the School Medical Officer is also the Medical Officer of Health, and as such is debarred from private practice, a circumstance tending to prevent any suspicion of bias, either in examination or recommendation for treatment.

The method of examination adopted, after consultation with the Head Teachers, and which they state causes the minimum of interference with the routine work of the school, is that—one day in each week is set apart for each school, and one department in each school is examined each week, these days being rigidly adhered to. This rule applies to the four large schools. The two smaller schools are visited once a month, the two intervening days being given to any of the larger schools which may have fallen behind in numbers.

Thus the work of each department is only interfered with once in three weeks. The hour of examination is 9 to 10 a.m. The weighing and measuring of height is done by the teachers at leisure, a standard machine being provided for each of the four larger schools, the office machine being used for the two smaller ones, and moved as required.

Some of the schools possess better facilities for examination than others, and every assistance has been rendered by the teachers. In St. Mary's, Cromwell Road, St. Augustine's, and St. Paul's schools, screens to ensure privacy are requisite, but have not yet been provided.

A circular asking for definite information as to age and previous illnesses of an infectious character is sent by the

teacher to the parents or Guardians of each child prior to the examination, and inviting these to be present, if they so desire. This invitation has been considerably responded to and I think is beneficial, as it tends to remove nervousness from the child, gives the parent an idea of the scope and meaning of the examination—concerning which many curious ideas were at first prevalent—and allows the examining officer in many cases to give general advice as to the needs of the child.

It was inevitable that the usual crank or faddist should arise, who is invariably opposed to anything he does not originate himself, and one or two of these have intimated their “conscientious objection”—to use their own words—to their children being examined, but the number has been so small as to be practically ignored, and they have been treated in this manner. One crank gravely informed me that he objected to the examination, unless the State (with emphasis) was prepared to clothe and feed, and give all necessary medical attendance to his children. As I could not, on behalf of the State, promise these things, the examination did not take place.

The appointment, from the beginning of November, of a School Nurse has had a good effect, removing some causes of objection as regards females. She visits the houses of the neglectful parents and gives them advice and assistance, and in some few cases with good results. In Holy Trinity and St. John's districts the services of the Parish Nurses are also available for the same purpose, to some extent.

The total number of children primarily examined during the 21 weeks the actual examinations have gone on is 1184, giving an average of 11·3 per day. To this, however, has to be added 361 re-examinations made, to see whether defects—of which notice had been given—have been remedied. These latter, however, as a rule occupy only a very short time. This brings the average to 15 per day.

Defects of vision, and of cleanliness in any form, or contagious disease, or anything likely to be injurious to the health of the child or a menace to its neighbours, have had written notice

of such served upon the parents or guardians. Where one of these are present verbal notice in the first instance is given, and on neglect to remedy, written notice. 250 primary written notices have been sent and in 56 cases followed by a more peremptory second notice. Of this total only 72 have not been complied with, the names of all of which will in due course be placed before the committee for further action.

Of the numbers examined 591 were males, 593 females, and the figures for each of the schools are : St. John's 282, St. Mary's 225, Cromwell Road 288, Holy Trinity 282, St. Paul's 50, St. Augustine's 57. The closure of Holy Trinity Girls' and Infants' school in December has reduced the numbers for that school, which otherwise would have had the maximum number.

Further particulars as to numbers, etc., where such may be of interest, will be found in the Tables appended. As the months have succeeded each other it has become evident that the standard of cleanliness has risen to an extraordinary extent, and that the Act is already having a deterrent effect as regards neglectful parents.

As regards cleanliness of body I feel bound to make some remarks regarding baths for school children. It is found that whilst visible portions of their frame are clean, and of late months that even the chest has been washed prior to my examination, but that when a sudden and unexpected examination was made of the feet of a girls' school (this was in connection with an infectious outbreak) that not one per cent. were fit to be seen. As this was in July no excuse as to cold or lack of means of cleansing could be available.

It has been urged by the teachers more especially of the girls' schools that some provision should be made by the Local Authority for school girls bathing in the sea during the summer. I most strongly and urgently advise that this should be done before next summer. Screens are erected for the use of boys and men. Why should not the girls of the town and of our schools have the same facilities accorded them ?

Cleanliness is next to Godliness. If one hundredth part of the time and money that has been expended on the subject of religious education were given to this subject, every school would have had its proper quota of baths, and the health of the child improved accordingly.

During a visit to Germany this summer, and an inspection of some schools in and about Berlin, I found that shower baths with hot and cold water were provided within the school, and that their use was just as compulsory as any other portion of the school curriculum. In any new schools that may be built this matter ought to be considered. In the meantime some provision on the foreshore should be made for the use of the school children male and female.

It will be noted in the Tables appended that an account has been taken of children vaccinated or unvaccinated. To save enquiry upon this subject, I mention here the object in recording this. Upon an outbreak of small-pox it is essential that the Health Authorities should have knowledge of the unprotected people, and these records would, in the event of an outbreak affecting a school, save an individual examination of each child, in a time of hurry and stress.

The same applies exactly to the Record kept of other infectious diseases a child may have had. The knowledge gained is private and confidential and will not be used for other purposes. I am, however, astonished at the large percentage, practically 30%, that are unvaccinated, and can only, as a firm believer—from experience—in the protective power of vaccination, sincerely hope that we may be spared from a visitation of this dreadful disease with such an enormous number liable to infection.

Defective vision is much greater than was suspected, 23% of the cases examined having one or both eyes defective. Strenuous attempts have and are being made to have these defects remedied, and some 56 of the whole are still as formerly. As some of these have even neglected to take medical advice they should be severely dealt with. It is essential that some scheme should be

formulated without delay whereby those in *poverty* should be enabled to have their wants properly attended to. The physicians at the Eye Infirmary have had an excessive strain thrown upon their time by the large numbers who have used this charitable institution as a means of advice, and my attention has rightly been called to it. The Act empowers you to make some provision in such cases, both for the examination and for the provision of necessary appliances.

Defective teeth have been found to the extent of 41%, that is nearly every alternate child has to some extent bad teeth. Some of these are, of course, the milk teeth, and will be replaced by the permanent teeth, but I cannot recall one single case where any professional advice had been taken as to the removal of carious teeth to allow of the proper growth of the permanent ones.

I have to the present, taken no steps as regards teeth and their treatment until some decision is come to, both as regards enforcing treatment and making provision for treatment.

As under another division I have make remark upon the prevalence of stomachic complaints as a cause for absenteeism from school, the subject of the proper treatment of the teeth,—these being in the great majority of cases the cause of the stomachic trouble—requires your most earnest and careful consideration.

The numbers that are insufficiently clothed or shod are comparatively small, and it is gratifying to know that in nearly all bona-fide cases the teachers have means of relieving these.

Enlarged tonsils and adenoids are rather prevalent and where considered advisable notice has been given to have these removed. In very few cases has this notice been acted upon.

Cases of rickets, tuberculosis, diseases of heart and lungs (other than tubercle), and of the nervous system are exceedingly few.

The number of cases of Contagious Disease, such as ringworm, itch, etc., have been astonishingly few. Ringworm during

the last six months has been nearly entirely absent, due in some measure to the strenuous efforts made to deal with it during the past two years. Itch has been found to be confined to children coming from houses that are frequented by seamen.

Under the heading of Mental condition we have a rather large percentage, 47%. This requires some explanation. For the purposes of the Act I have fixed five divisions, viz.: Bright and Intelligent children, Fair, Dull, Backward, and Mentally Defective. The entry under this is made by the teacher who naturally has the greatest opportunity of judging. As the teachers vary in their standard, some being more optimistic than others, the standard can only be a comparative one as between schools, but making all allowances, it is a subject of regret that practically one half of your scholars are judged by your teachers to be under the normal standard of bright and intelligent. My own observations, limited though these are, tend to confirm the teachers' judgment.

The mentally defective are few, two in number, and are not included in this percentage.

Confirmed epileptics have not been found. No steps have been taken to the present to deal with those mentally defective.

The average height and weight at the four age periods as compared with that of the general population of Great Britain (from the Anthropometric Committee's Report, of 1883) is as under :—

Age last Birth-day.	MALES.				FEMALES.			
	Height in inches.		Weight in pounds.		Height in inches.		Weight in pounds.	
	Great Britain.	Weymouth.	Great Britain.	Weymouth.	Great Britain.	Weymouth.	Great Britain.	Weymouth.
5	41·03	47·1	39·9	40·7	40·55	47·05	39·2	40·9
7	45·97	47·8	49·7	51·8	44·45	46·1	47·5	47·2
12	54·99	54·7	76·7	72·5	55·66	55·7	76·4	71·9
13	56·91	58·3	82·6	81·7	57·77	57·1	87·2	82·8

Height of Male Infants age last birthday 5, is considerably in excess of the average, but weight is practically the same. The height and weight, however, are not proportional. The height

and weight of Female Infants is practically similar to that of the Males, though it should be slightly less. The slight increase of one month in the average age would, however, nearly balance this.

At the second age period, age last birthday 7, the number of males examined is small. The height and weight are both in excess of the average, but are more proportional. In Females the height is greater but the weight is the average. There is in this, as in Infants, a lack of proportion.

The third age period dealt with is average age 12. Here the height is only slightly in excess of the average, whilst the weight is under it. With Females the height is the average but the weight less.

At the termination of school life, age last birthday 13, Male height is slightly in excess, but weight less, whilst in Females the height is the average but the weight considerably under.

Summing up, we find that in this district the height at all ages is greater than the average, but the weight generally is less, and in all cases is not proportional. This in one way accounts for the large numbers that are marked as defective in nutrition. The children run to length but not to weight.

It has been found necessary for the prevention of Infectious Disease to exclude children from the various schools under Art. 53b of the Code of 1908 to the number of 207, and under Art. 57 to close the Girls' and Infants' Departments of Holy Trinity School from December 10th, 1908, to January 11th, 1909.

The short space of time that has elapsed since action was formally taken does not enable me at present to express any opinion upon the "method of results of instruction in personal hygiene and temperance," nor the "results of physical or breathing exercises."

No arrangements have been made for open air schools, school camps, etc., though during the summer months many of the classes are taught in the open air in the playground, a method which might be greatly extended and enlarged beyond the

boundaries of the playground, more especially in all the older schools, situated as they are generally in congested districts. The subject may well be considered with the establishment of bathing camps mentioned previously.

It has not been required of the School Medical Officer to examine the teachers, pupil teachers, or scholarship candidates.

Other miscellaneous work has been the examination of boys for industrial schools, sent under school attendance law, to the number of one, and the examination and certification of poor children for minor ailments, such as do not require the attendance of a Doctor, but are sufficient cause for being absent from school. These have numbered 3317. This, while extremely useful, has been much extended beyond its original intentions and requires some modification. These children are obliged to personally present themselves at the Municipal Offices for examination, but it has degenerated to considerable extent to the mere asking for a certificate after an illness, leaving the M. O. to judge by appearances whether there is truth in the statement or not. In many cases these children have been under medical attendance, and it is neither equitable or ethical that this should continue.

Where a medical man has been in attendance the certificate should be signed by such, and if considered necessary submitted to the School Medical Officer. The medical men, many of them giving their services gratuitously or practically so, naturally and justly desire a fee for a certificate. The parents object to pay for this and make a demand for it from the School Medical Officer. He has no knowledge of the case and cannot conscientiously grant it, apart from ethics. The usual result is a complaint laid to some private member who, ignoring the maxim *audi alteram partem*, makes the matter public in such a manner as to approach a censure. Where a certificate is demanded for the use of the Education Authority and a medical man is in attendance upon the child, such certificate, I hold, should be paid for by the Authority requiring it.

To sum up, the matters requiring urgent attention are—(1) The remedying of the hygienic defects in the schools, more es-

pecially those dealing with defective ventilation and sanitation, and a more modern method and system of school cleaning ; (2) The method to be employed for the treatment or alleviation of defects ; (3) The method to be employed to deal with defaulters who neglect to avail themselves of any means of treatment ; (4) The provision of open air schools or school camps, and facilities for baths or bathing.

As the first of these has been persistently reported upon for six years further delay in dealing with it in its entirety is to be deprecated.

In an interim report made, I called attention to the large number of children engaged in work before and after school hours, many of them in work which should have brought them under the Factory and Workshop Act, and in the vast majority of cases, work which considering their immature state was detrimental to their physical development and also to their educational progress. The statistics shewn in the Table I believe will amply confirm the conclusions then drawn.

It is not altogether an exceptional case that recently came to view in a girl of 13, whose weekly hours of employment numbered $78\frac{1}{2}$ as a minimum, including her hours at school. No time as a rule is allowed these children for meals, which are taken in a rush, and anyhow and anywhere. In the case mentioned above, the enquiry as to work was led up to by the neglected and verminous condition of the child, and evidences of breakdown in general health. Many other cases could be given, some with even longer hours ; boys falling asleep in school from sheer overwork and long hours. After the presentation of the interim Report a resolution to prepare and adopt bye-laws dealing with the employment of children was adopted, and I trust will be actively proceeded with.

STATISTICS OF AGE, HEIGHT, WEIGHT AND DEFECTS.

SCHOOL.	DEPT.	Numbers examined		Average Age	Height		Weight		Clothing			Unvaccinated	Nutrition	Cleanliness		Teeth		Nose and Throat						Ears		Eyes.						Mental Condition	Contagious Disease	Deformity	Rickets	Tuberculosis	Lymph Glands	Heart	Lungs	Nervous System	Skin	Other Diseases or Defects	Mentally Defective	Exceptional Cases	
					Eng.	Centi-metres	Eng.	Kilo-grams	Sufficiency	Cleanliness	Footgear			Body	Head	Condition	Cleanliness	Tonsils	Adenoids	Glands	Nasal Discharge	Mouth Breathing	Speech and Articulation	Hearing	Disease or Discharge	Conjunctiva	Lids	Squint	Other Defects	Vision															
		M	F	inches		lbs.																																							
St. John's ...	Infants	43	...	5 5/12ths	43.3	110	42.7	19.39	2	13	5	1	1	18	1	6	2	...	2	1	2	2	
St. Mary's ...	do.	38	...	5 8/12ths	44.9	114	40.1	18.2	2	2	2	4	13	6	3	16	5	13	3	2	4	6	2	...	1	18	...	2	2	2	
Cromwell Road ...	do.	42	...	5 10/12ths	52.8	134	41.5	18.8	9	4	1	13	11	7	9	18	3	8	3	...	3	2	3	19	2		
Holy Trinity ...	do.	67	...	5 3/12ths	48.8	124	39.5	17.9	1	1	...	16	16	8	3	9	1	12	...	1	2	1	4	...	47		
St. Paul's ...	do.	22	...	5 10/12ths	50.8	129	41.2	18.7	1	6	4	1	1	13	...	2	1	10		
St. Augustine's...	do.	4	...	6	42.1	107	39.5	17.9	1	...	1	1	2	2	...	1	1	4	1	3	4		
		216	...	5 8/12ths	47.1	119.6	40.7	18.48	13	7	7	53	51	25	17	75	11	43	11	3	9	12	8	1	3	4	...	3	98	2	2	2	2	2	1	...	5	1	...	4	
St. John's ...	do.	...	45	5 9/12ths	44.5	113	42.7	19.4	...	1	1	10	7	1	2	14	...	5	1	3	...	1	1
St. Mary's ...	do.	...	30	5 8/12ths	51.2	130	38.4	17.4	...	2	...	5	7	9	8	13	3	6	2	1	2	3	1	...	2	6	1	
Cromwell Road ...	do.	...	37	5 8/12ths	50.4	128	40.6	18.4	3	1	...	10	11	7	7	16	...	4	6	1	1	...	5	...	1	18	1	2		
Holy Trinity ...	do.	...	46	5 6/12ths	46.05	117	38.6	17.5	3	1	...	16	13	8	13	13	1	7	3	1	2	...	3	39	
St. Paul's ...	do.	...	28	6 6/12ths	47.2	120	41.2	18.7	4	5	...	5	6	8	4	11	3	4	2	1	1	15	
St. Augustine's...	do.	...	2	5 6/12ths	42.9	109	43.9	19.9	1	1	2	1	2		
			188	5 9/12ths	47.05	119.5	40.9	18.56	10	10	1	47	45	33	34	69	7	26	13	3	7	3	10	1	4	2	1	4	80	3	2	...	2
Holy Trinity ...	Boys, 7 to 10	39	...	7 9/12ths	48.05	122	51.5	23.2	8	4	2	9	15	8	2	18	3	1	1	2	...	3	2	2	12	30	...	1	
St. Augustine's...	do.	17	...	8 2/12ths	47.65	121	52.6	23.9	5	4	2	2	7	4	1	7	4	3	1	4	13	
		56	...	7 11/12ths	47.8	121.5	51.8	23.5	13	8	4	11	22	12	3	25	7	4	1	2	...	4	2	1	...	16	43	...	1	
St. Mary's ...	Girls, 7 to 10	...	54	7 9/12ths	46.45	118	48.3	21.9	6	4	5	25	14	12	14	21	7	11	1	1	3	5	1	2	...	29	22	
Holy Trinity ...	do.	...	50	7 5/12ths	45.7	116	46.1	20.9	2	2	2	8	19	7	6	29	...	9	6	10	2	15	32		
Cromwell Road ...	do.	...	54	7 10/12ths	46.45	118	48.1	21.8	3	8	3	8	21	16	30	17	6	2	3	2	45		
St. Augustine's...	do.	...	12	7 10/12ths	45.7	116	46.7	21.2	2	1	2	3	3	4	1	6	1	3	4		
			170	7 8/12ths	46.1	117	47.2	21.4	13	15	12	44	57	39	37	86	25	29	9	3	3	18	5	...	2	2	...	48	107	1	1	1		
St. John's ...	Boys, 10 to 13	30	...	12 4/12ths	56.3	143	75.8	34.4	...	2	...	10	3	3	...	10	...	5	2	1	5	9		
St. Mary's ...	do.	59	...	11 9/12ths	54.7	139	72.5	32.9	8	2	7	26	19	6	1	19	3	11	4	3	1	13	32		
Cromwell Road ...	do.	68	...	12	54.7	139	71.6	32.5	4	4	1	18	19	6	4	27	7	7	8	1	1	6	1	2	2																				

Borough of Weymouth and Melcombe Regis.

ANNUAL REPORT

AND

RESULTS OF THE OBSERVATIONS

MADE

DURING THE YEAR 1908,

AT THE

METEOROLOGICAL STATION, WESTHAM.

LATITUDE, $50^{\circ} 36' 20''$ N. LONGITUDE, $2^{\circ} 26' 50''$ W

HEIGHT ABOVE SEA LEVEL —22 FEET.

I. J. BROWN, F.R.Met.Soc.,

Honorary Borough Meteorologist.

WEYMOUTH :
HARRY WHEELER, LTD.,
PRINTERS.

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To the
Worshipful the Mayor, Aldermen, and Councillors
of the Borough of Weymouth and
Melcombe Regis.

GENTLEMEN,

I have the honour of submitting to you my Eleventh Annual Report relative to the administration of the Meteorological department of the Borough of Weymouth and Melcombe Regis in the year 1908, and the principal results of the observations made during that year. All the instruments are in good working order, the readings being taken regularly at 9 a.m. and 6 p.m. by Mr. J. H. Bolam and his assistants at the electrical works, all the observations having been taken by them in a most careful manner, giving the greatest satisfaction.

The charts recording the bright sunshine are sent each month to the Meteorological Office to be verified, and on their return are again despatched to the Royal Meteorological Society.

On July 23rd the station was inspected by H. Harries, Esq., of the Meteorological Office, who expressed his satisfaction with the management and arrangements.

RETURNS.—During the year 1324 telegrams have been despatched as follows: Daily to the *Daily Telegraph*, Meteorological Office, and Weather Bureau, the latter “distributing our reports to the *Standard*, *Daily Mirror*, *Express*, and a large number of other daily and weekly papers,” from June to September inclusive to the *Daily Chronicle* and *Morning Leader*. Weekly reports are sent to all local papers, and full monthly returns to the Meteorological Office, Royal Meteorological Society, and to Dr. H. R. Mill.

I received, and replied to, a large number of letters requesting fuller information of the abnormal rainfall of October 21st.

From July 1st to September 14th a very interesting sunshine race was inaugurated by the *Daily Mirror*, the various Health Resorts being divided into sections, Weymouth being the winner of section 3, which comprised Dorset, Somerset, Devon and Cornwall. You will be interested to know that our weather reports each week during the season appeared in upwards of 17 million copies of the various papers.

I am, Gentlemen,

Yours faithfully,

I. J. BROWN.

2, St. Thomas St., Weymouth,
February, 1909.



THE BAROMETER—9 a.m.
Corrected for Temperature and Altitude.

1908.	Mean.	Difference from the Average.	Highest	Date.	Lowest.	Date.
January ...	Inches. 30·175	Inches. +·083	Inches. 30·559	21	Inches. 29·211	8
February ...	29·817	—·079	30·757	7	29·347	29
March ...	29·877	—·102	30·230	15	29·269	6
April ...	29·868	—·085	30·383	7	29·372	27
May ...	30·031	+·052	30·540	18	29·416	6
June ...	30·107	+·071	30·359	27	29·729	16
July ...	30·051	—·035	30·471	29	29·522	17
August ...	30·034	—·005	30·405	3	29·559	28
September ...	30·027	—·057	30·302	14	29·362	1
October ...	30·109	+·172	30·390	23	29·860	27
November...	30·077	+·106	30·374	18	29·614	8
December ...	29·856	—·105	30·390	1	28·939	10
Year ...	30·002	+·003	30·757	Feb. 7	28·939	Dec. 10

SHADE TEMPERATURE.

1908.	9 a.m. <i>mean</i>	Max. <i>mean.</i>	Min. <i>mean.</i>	Range <i>mean.</i>	Max. and Min. <i>mean</i>	Differ- ence from the Average	Highest	Date.	Lowest	Date	Relative Humidity.
January	39.7	44.8	35.2	9.6	40.0	-1.7	53.0	17	22.9	11	% 87
February	43.2	48.4	39.0	9.4	43.7	+2.5	55.1	6	29.6	2	87
March	42.5	47.5	36.2	11.3	41.8	-1.8	55.1	23	28.3	5	78
April	45.7	52.9	39.0	13.9	45.9	-1.5	63.4	16	30.1	24	76
May...	55.5	60.7	48.1	12.6	54.4	+1.9	73.8	29	40.2	23	79
June	61.4	67.3	51.7	15.6	59.5	+2.0	80.7	4	44.3	7	69
July...	64.0	69.6	55.2	14.4	62.4	+0.8	80.8	2	51.4	22	72
August	63.6	69.0	54.7	14.3	61.8	+0.4	80.8	7	46.9	12	68
September	58.5	63.4	51.9	11.5	57.6	-1.0	68.3	30	42.1	13	80
October	57.5	61.5	51.3	10.2	56.4	+4.1	72.9	4	37.1	22	87
November	49.7	54.5	45.2	9.3	49.8	+3.0	61.8	12	32.7	10	82
December	44.8	49.7	40.5	9.2	45.1	+1.9	55.5	13, 16, 17, 21	19.3	30	87
Year ...	52.2	57.4	45.6	11.8	51.5	+0.9	80.8	July 2 Aug. 7	19.3	Dec. 30	79

BRIGHT SUNSHINE.

As registered by the Campbell-Stokes Lense Burning Recorder.

1908.	Actual Sunshine	Difference from the Average.	Greatest Daily Amount.	Date	Days on which sun shone	Differ- ence from the Average	Sunless Days.	Amount of Cloud.
	<i>Hours</i>	<i>Hours.</i>	<i>Hours.</i>					0 to 10
January ...	82.3	+ 19.1	7.4	23	22	+ 2	9	5.4
February ...	70.2	- 14.9	7.9	14	25	+ 4	4	6.8
March ...	126.1	—	10.4	23	27	+ 2	4	5.0
April ...	165.6	— 3.9	12.3	8	27	+ 1	3	6.7
May ...	211.3	- 16.0	14.0	28	29	—	2	6.1
June ...	276.9	+ 58.1	15.2	18	29	- 2	1	5.7
July ...	237.0	- 14.6	13.7	29	29	- 1	2	5.8
August ...	259.6	+ 29.0	13.9	1 & 7	29	+ 3	2	4.8
September ...	141.0	- 28.4	11.4	10	26	- 1	4	6.6
October ...	133.0	+ 26.5	10.2	2	25	- 1	6	5.6
November ...	103.8	+ 28.3	8.4	9	24	+ 2	6	5.6
December ...	51.1	+ 1.8	6.0	18	21	+ 3	10	7.0
Year ...	1857.9	+ 85.0	15.2	June 18	313	+ 12	53	5.9

RAINFALL.

1908.	Total Amount.	Difference from the Average.	Wet Days or falls of 0·01 in. or more.	Difference from the Average.	Mean Wet Day Rate of Rainfall.	Greatest fall in 24 hours.	Date of greatest fall.
	<i>Inches</i>	<i>Inches</i>			<i>Inches.</i>	<i>Inches</i>	
January ...	0·93	-1·48	12	-3	0·08	0·49	7
February ...	1·55	-0·37	18	+7	0·11	0·66	16
March ...	2·36	+0·45	19	+6	0·12	0·58	5
April ...	1·86	+0·13	15	+3	0·12	0·54	29
May... ..	1·42	-0·29	13	+3	0·11	0·32	14
June ...	0·39	-1·29	3	-7	0·13	0·30	1
July... ..	1·09	-0·62	8	-2	0·14	0·46	16
August ...	1·84	-0·35	9	-3	0·20	0·61	31
September ...	2·42	+0·39	16	+6	0·15	0·35	19
October ...	6·50	+2·85	13	-4	0·50	4·00	21
November ...	1·12	-1·92	9	-5	0·21	0·43	21
December ...	3·09	+0·28	21	+5	0·15	0·64	10
Year ...	24·57	-2·22	156	+6	0·17	4·00	Oct. 21

THE WINDS.

Observed daily to 16 points, but in table reduced to 8 points of the compass.

1908.		Velocity in Miles per hour.		Number of Observations—9 a.m. and 6 p.m.								
		Total.	Mean per day	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calms.
January	...	10656	343	1	3	13	11	5	7	16	5	1
February	...	10894	376	5	0	2	2	1	1	40	6	1
March	...	10416	336	2	5	4	2	8	8	22	10	1
April	...	10608	353	16	4	12	3	4	1	16	4	0
May...	...	9360	302	1	0	9	2	10	11	28	1	0
June	...	8304	276	4	3	6	5	9	4	26	3	0
July...	...	8472	273	6	0	4	2	8	6	31	2	3
August	...	10200	329	6	3	8	1	4	6	28	5	1
September	...	11256	375	4	2	1	2	10	7	30	3	1
October	...	8736	282	1	5	13	17	17	2	5	1	1
November	...	10944	365	5	1	17	3	5	8	15	6	0
December	...	11544	372	1	1	13	3	8	10	19	6	1
Year	...	111390	332	52	27	102	53	89	71	276	52	10